

INNOVATIVE AND SUSTAINABLE

POWER FOR ALL



The background of the slide is a dark, industrial scene featuring large pipes and structural elements. A large, solid orange rectangle is positioned on the right side, partially overlapping the industrial background. The title text is written in white, bold, sans-serif capital letters across the orange area.

INNOVATIVE AND SUSTAINABLE POWER FOR ALL

GLOBAL BEST PRACTICE
IN POWER BUSINESS

Investors can acquire company's information from
Annual Disclose Form (Form 56 - 1) as shown in www.sec.or.th
or the company's website at www.gpscgroup.com



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POWER ACCESSIBILITY

Striving to generate accessible clean
energy to create a foundation for strong
and self-reliant communities





QUALITY OF LIFE

Elevating the quality of life through
electricity and leveraging power expertise
to develop communities in remote areas



ECOSYSTEM

Emphasizing eco-conscious and eco-friendly consumption of resources through operational efficiency enhancement



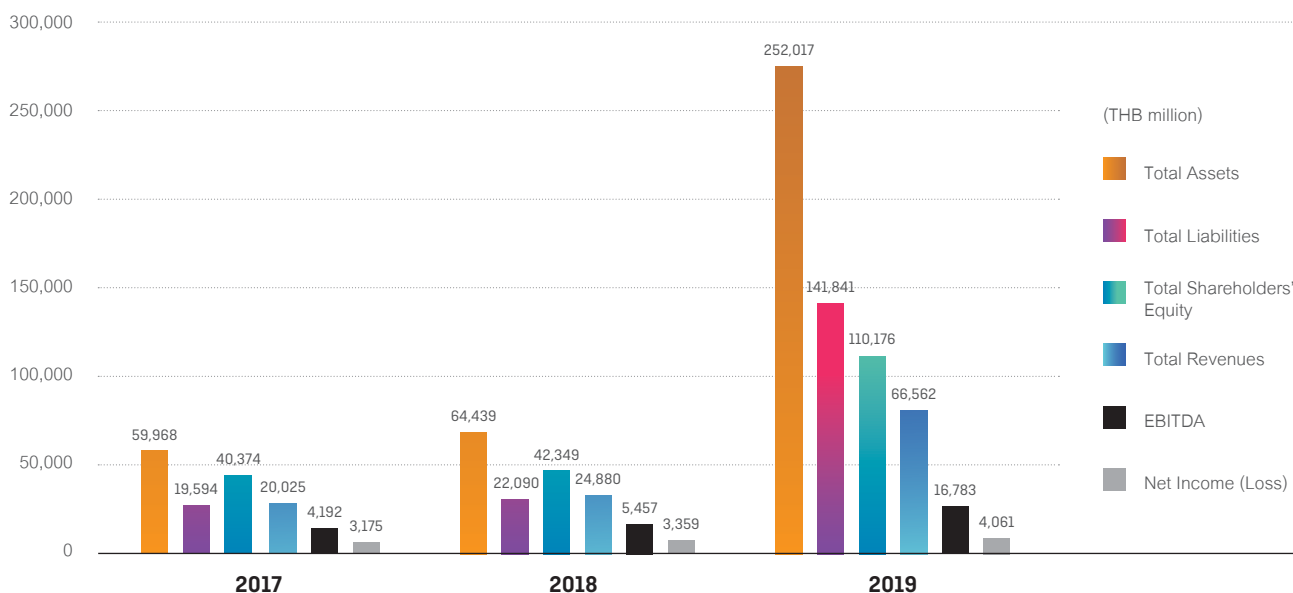
SUSTAINABLE INNOVATION

Fostering sustainability through innovative
technologies that promote environmental
and energy conservation

OPERATIONAL HIGHLIGHT



FINANCIAL HIGHLIGHTS



Remark: Total revenue includes revenue from Nitrogen sale.

EARNINGS PER SHARE (THB/share)

2017 2.12

2018 2.24

2019 2.25

DIVIDEND PER SHARE (THB)*

2017 1.25

2018 1.25

2019 1.30

DIVIDEND YIELD (%)**

2017 1.60

2018 2.14

2019 1.52

FINANCIAL RATIOS

		2017	2018	2019
EBITDA to Revenue from Sale	(%)	20.93	21.93	25.21
Interest Coverage Ratio	(times)	7.85	7.11	1.86
Net Debt to Equity Ratio	(times)	0.29	0.27	0.78
Return on Equity	(%)	8.39	8.55	5.76
Return on Assets	(%)	5.66	6.25	3.79

Remark:

* Dividend payment from the 2019 operating results at THB 1.30 per share is divided into interim dividend for the first half of 2019 at THB 0.50 per share which was paid to shareholders. The remaining dividend for the second half operating results for 2019 will be paid at THB 0.80 per share. However, the right to receive dividend payment is subject to the approval of the 2019 Annual General Meeting of Shareholders.

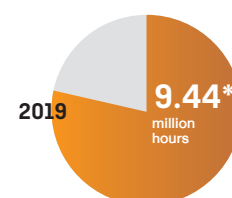
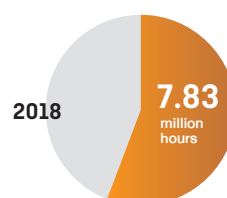
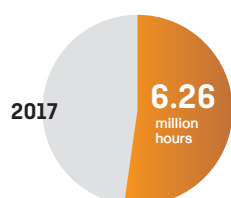
** Calculated from GPSC's closing share price on period end

PRODUCTS		2017	2018	2019
Electricity	(GWh)	4,365	5,412	17,566
Steam	(Thousand tons)	6,429	6,572	12,821
Chilled Water	(Thousand refrigeration tons)	25,740	27,266	29,343
Industrial Water	(million cubic meters)	4	5	14
Refuse Derived Fuel: RDF	(tons)	-	4,491	13,707

AVAILABILITY PER CONTRACTED AVAILABLE HOURS (IPP)		2017	2018	2019
Glow IPP Power Plant	(%)	N/A	N/A	100
GHECO-One Plant	(%)	N/A	N/A	100
Sriracha Power Plant	(%)	100	100	99.94

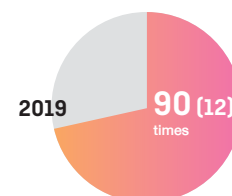
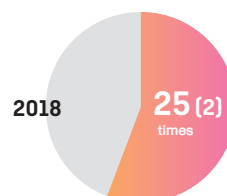
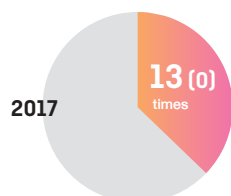
Accumulative Work Man - hours without Lost Time Accident

(Since 2013)



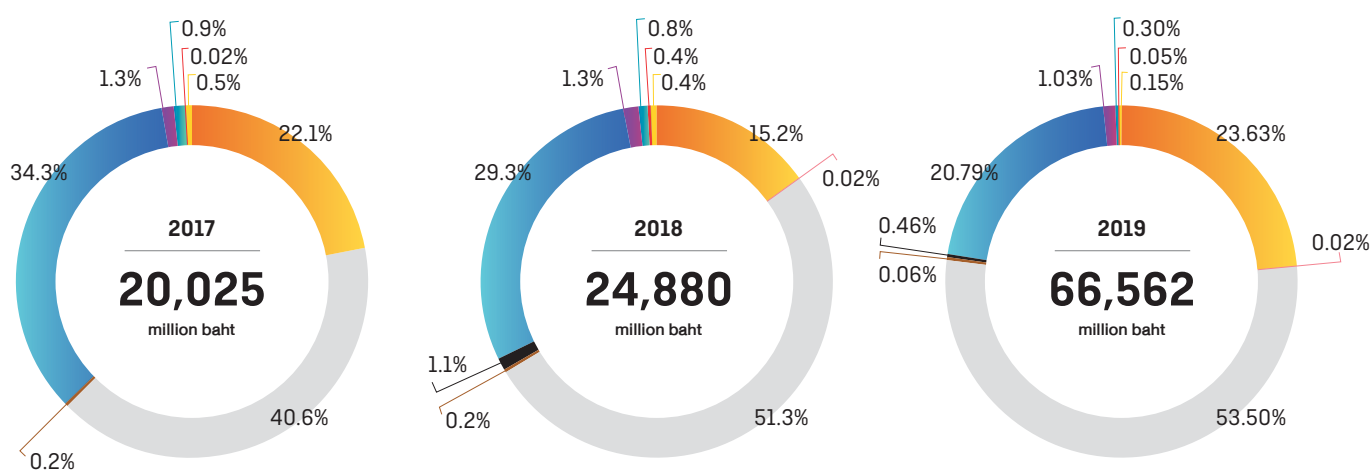
Number of Plant Incident (SPP/Cogen.)

(and impact to industrial customers)



Remark: * Not including the operating results of Glow Energy Public Company Limited.

PRODUCT SALES VALUE



MESSAGE FROM CHAIRMAN AND PRESIDENT & CEO



**Mr. Chavalit
Tippawanich**
President & CEO



**Mr. Pailin
Chuchottaworn**
Chairman

Dear Shareholders,

It was a year of mediocre global and domestic economic growth, caused by the ongoing trade war and geopolitical instability, coupled with a far-from-healthy energy price situation. Despite these, Global Power Synergy Pcl (GPSC) has achieved its business goals and significantly grown its profit with capacity growth in power and steam generation alike, resulting from business acquisition and commercial operation of various invested projects. As for sustainability, we still continued to value and implemented innovation, personnel development, and engagement in community, social, and environmental improvement of standards. As a result, our financial position and potential for consistent and sustainable growth are robust.

This year we acquired the business of Glow Energy Public Company Limited (GLOW) and delisted its shares from SET. The move resulted in our profits of 21 percent higher than last year with increases in business volumes in this very first year of acquisition, while enabling us to book synergy value from joint operation of sectors apart from enhancing power and utility security for greater stability of our customers. We also achieved notable success in post-acquisition capital structural administration by issuing and offering recapitalization shares worth THB 74 billion and issuing debentures worth THB 35 billion at a suitable cost of funds, designed for repayment of short-term loans for the GLOW acquisition. Finally, we maintained our investment grade, attested by credit rating agencies like S & P Global Ratings and Fitch Ratings.

In 2019 we announced commercial operation of three more projects. First, the 65-MW Nam Lik 1 Project in Lao People's Democratic Republic, where our equity is 40 percent. Second, the 45-MW, wholly owned Central Utility Plant 4 Phase 1 in Rayong with 70 T/H steam capacity. And third, the 1,285-MW Xayaburi Project, also in LPDR, where our equity is 25 percent. Our business growth through energy technology and innovation is evident in the pilot installation of the Energy Storage System (ESS), extended from solar rooftop installation at PTT Stations and Café Amazon outlets to grow the capability of solar power consumption while trimming energy bills for these service stations and outlets. This prototype consumption of stored energy is efficient, tangible, and extendable to commercial successes.

We are committed to evolving power innovations to accommodate the future in Wang Chan Valley by experimenting with solar power management (both solar rooftops and solar floating PVs) in conjunction with energy storage installation and the application of the Blockchain technology for building-to-building power trade management. The design is for the

practice to be a prototype for energy management and for Wang Chan Valley to be Thailand's innovation research district.

As for organization administration, we value and stress the development of personnel, organization, and innovation through our ACT SPIRIT work values and corporate-wide application of risk management. Specifically, we routinely assess, analyze, and revise our management practices, which we believe contributes to our sustainable goal achievement.

We particularly value sustainable partnership to bring good things to communities, society, and the environment through various projects. To cite a few instances, the Restore Lives, Restore Beach Project's key goal is to preserve marine ecology and develop communities in parallel with sustainable business. The Zero Waste Village Project advocates community awareness of proper garbage management to cut community waste and build on it to generate income or for social enterprises. Finally, the Young Social Innovator Project promotes a forum for high-school and vocational education students to present ideas through projects designed to resolve social, economic, natural resource, and environmental problems in a sustainable way on actual sites.

Thanks to our active drive and value given to communities and the environment, this year we have garnered assorted acclaim, including the Asia Responsible Enterprise Award 2019 (Green Leadership Award), a prototype low-carbon industrial works award, and a 2019 award for industrial works' sustainable responsibility for society and communities.

For 2020, GPSC is committed to growing our business further by extending our investment both geographically and through more extensive innovation. The Board of Directors, the management, and employees are grateful for your perennial trust in us.

REPORT OF THE AUDIT COMMITTEE

Dear Shareholders,

The Audit Committee consists of three independent directors, all of whom command pertinent expertise and experience in engineering, energy businesses, law, financial accounting, and corporate management. They are, therefore, qualified to review the credibility of financial statements in accordance with the regulations of the Office of Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET). The Audit Committee comprises the Chairman, Mr. Payungsak Chartsutipol, and two audit committee members, namely Mrs. Suvimol Chrityakierne, and Maj. Gen. Chaowalek Chayansupap. On March 4th, 2019, the committee's composition was changed because Mr. Payungsak Chartsutipol resigned from his post in the Audit Committee (to become Chairman of an affiliated company). As such, the Board of Directors order 3/2019 reached a unanimous decision to appoint Mrs. Suvimol Chrityakierne as the Chairman of the Audit Committee and Mr. Kurijit Nakornthap as a member of the Audit Committee, effective since March 20th, 2019 onwards. Afterward, on August 31st, 2019, Mrs. Suvimol Chrityakierne resigned from the Directorship of the company and hence from the Audit Committee as well. Then, the Board of Directors with order 8/2019 appointed Mr. Kurujit Nakornthap as the Chairman of the Audit Committee and Mrs. Nicha Hiranburana Thuvatham as a member of the Audit Committee, respectively. Serving as secretary to this Committee is Ms. Attayar Sukotanang, Vice President, Corporate Internal Audit.

The Committee independently performed its duties as prescribed by GPSC's Board and as specified in the Audit Committee Charter, in compliance with all the rules stipulated by the SEC and SET. The Audit Committee strives to ensure good corporate governance and comprehensive reviews of financial reports, connected transactions, risk management, internal controls, and internal audit systems. The Audit Committee also ensures that the Company remains in compliance with laws and regulations relevant to GPSC's domestic and overseas operations in order to create value added to the organization.

In 2019, the Committee held 7 meetings, where consultations were held with the management, Internal Audit, and the external auditor. This year, performance highlights are as follows:

1. Review of Financial Statements: The Committee reviewed material items and issues of quarterly and annual financial statements of GPSC and its subsidiaries in compliance with the Thai Financial Reporting Standards (TFRS) in cooperation with related members of the management and the external auditors. Material items reviewed included the accuracy and completeness of financial information, the important

adjustment entries, the accounting estimation, as well as the information disclosure of the financial statements. The committee considered clarifications from the external auditor, top executives, and other relevant parties which ultimately led to the conclusion that GPSC's financial statements and disclosures in the notes to the financial statements aligned with TFRS. The external auditor's unqualified opinion was that the internal control evaluation results were appropriate in that no data were concealed, and the external auditor was able to work independently. In addition, the Audit Committee, together with the external auditor, in the absence of the executives, discussed matters related to auditing plans, their independence in fulfilling their duties, and the opinions of the external auditor.

2. Review of Connected Transactions: The committee reviewed connected transactions, particularly those posing potential conflicts of interest with GPSC and subsidiaries under the SET's and the SEC's announcements. This review revealed that GPSC and subsidiaries operated under regular business practices, exercised fairness and sensibility, and exhibited no benefit siphoning. In addition, its disclosure of information was carried out with accuracy and



completeness in compliance with GPSC's corporate governance policies as well as the SEC's and the SET's notifications.

3. Review of Risk Management: The committee reviewed the efficiency and appropriateness of GPSC's risk management, for which risk identification must consider internal and external factors, in terms of policy and processes in order to ensure that GPSC and subsidiaries had in place appropriate risk management processes that minimized any negative impact and responded to changes effectively and promptly. Risk management practices were effectively executed under the stated policy and plans, and were in line with GPSC and subsidiaries' short - term and long - term goals and strategic plans.

4. Review of Internal Control System: The committee reviewed compliance with the law and relevant regulations, together with the management, under the Three Lines of Defense concept, in which legal and regulatory compliance was audited, monitored, assessed, and reported on regular basis. In addition, the executives also assessed the internal control systems using the internal control assessment questionnaires prepared under the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In 2019, GPSC has initiated the Control Self-Assessment; CSA culture for the first line of defense in order to strengthen awareness for the importance of their own job responsibilities in business processes which helped to enhance effectiveness and efficiency in their work procedures and for good corporate governance. The focus was on prevention and problems faced by the first line of defense and on professionalism and systematic work. Moreover, the external auditor results demonstrated that there were grounds to be confident that GPSC and subsidiaries' internal control system helped to produce efficient and effective performance, and thus remained suitable for their businesses to achieve their defined objectives and goals. As a result, in 2019 no cases of violation of relevant laws and regulations were found in GPSC and subsidiaries.

5. Review of Internal Audit System: Having Corporate Internal Audit report directly to the committee ensured the unit's independence as is specified necessary in the Audit Committee Charter. The committee also reviewed and approved the annual internal audit plans and long-term plan covering GPSC, its subsidiaries, and their joint ventures. The committee also regulated the unit's operation to comply with Internal International Standards for the Professional Practice of Internal Auditing (The Standard), also to align with the strategies and directions of GPSC. This included the oversight for internal audit quality assessment from internal

and external assurance companies in order to enhance internal auditor's qualification and competency correlating to The Standard. In addition, the committee assessed the annual performance of the Corporate Internal Audit and reviewed its structural suitability and efforts in the continuous development of personnel. A headcount confirmed that were adequate and suitable resources to maximize the effectiveness and efficiency of audit quality. Importantly, in 2019, the Committee also emphasized the importance of applying IT applications for Data Analytics in audit work for greater efficiency and effectiveness of the internal audit process. The Committee expects to develop and to apply this approach continuously for other audit work onwards.

6. Appointment of the External Auditor for 2020: This process involved selecting external auditor candidates based on their independence, skills, competence, and experience in the electricity and energy business, together with deciding upon acceptable fees. Ultimately, the Audit Committee nominated PricewaterhouseCoopers ABAS Limited to join the Board of Directors, which is to be proposed at the 2020 Annual General Meeting of Shareholders. Names of individual auditors to be proposed and appointed as GPSC's 2020 external auditors are Ms. Amornrat Permpoonwathanasuk (CPA 4599), Mr. Boonruang Lertwisetwit (CPA 6552), or Mr. Phongthawee Ratanakoset (CPA 7795). These nominated auditors have secured SEC's concurrence as being suitable.

In summary, the Audit Committee carried out its duties and responsibilities in the manner stated in the Audit Committee Charter, employing their diverse expertise, care, prudence, and adequate independence while also providing recommendations for the equitable benefit of all stakeholders. The Audit Committee's opinion is that GPSC's financial reports are accurate and credible, and are also fully consistent with generally accepted accounting standards; GPSC's operations were in full compliance with all relevant laws and business obligations. Furthermore, the Committee found that GPSC had implemented good corporate governance, put in place adequate risk management, suitable and effective internal control, and efficacious internal audit systems.

On behalf of the Audit Committee.

Mr. Kurujit Nakornthap

Chairman of the Audit Committee



REPORT OF THE NOMINATION AND REMUNERATION COMMITTEE

Dear Shareholders,

The Board of Directors of Global Power Synergy Public Company Limited (GPSC) has resolved to appoint the Nomination and Remuneration Committee and prescribed that the Committee should be composed of at least three directors of GPSC, one of whom must be an independent director. Currently, the Nomination and Remuneration Committee comprises three directors, namely Mr. Payungsak Chartsutipol (Independent Director), serving as the Chairman of the Nomination and Remuneration Committee, Maj. Gen. Chaowalek Chayansupap (Independent Director) and Mr. Wittawat Svasti - Xuto (Director), serving as members of the Nomination and Remuneration Committee.

In 2019, the Nomination and Remuneration Committee convened a total of ten meetings. The summary of its operations is provided below.

1. Nominated qualified candidates for directorship to be submitted to the Board of Directors for consideration and proposed at the 2019 Annual General Meeting of Shareholders to be appointed as GPSC's directors to succeed retiring directors
2. Nominated qualified candidates for directorship to be submitted to the Board of Directors for consideration and appointed as GPSC's directors to replace directors who resigned before completing their terms
3. Nominated qualified candidates to serve on subcommittees to be submitted to the Board of Directors for appointment, taking into consideration the composition of the sub-committees as well as qualifications, knowledge, and expertise required for serving on such sub-committees
4. Reviewed the remuneration for the Board of Directors for 2019 to be submitted to the Board of Directors for consideration and proposed to the Annual General Meeting of Shareholders for approval, taking into consideration GPSC's operating performance and business size in comparison to other companies in the same business as well as the responsibilities of the Board of Directors
5. Reviewed the performance assessment of the President and Chief Executive Officer in 2018 to propose to the Board of Directors for approval

On behalf of the Nomination
and Remuneration Committee



Mr. Payungsak Chartsutipol

Chairman of the Nomination
and Remuneration Committee

REPORT OF THE CORPORATE GOVERNANCE COMMITTEE



Dear Shareholders,

Fully recognizing that corporate governance is pivotal to corporate sustainability and contributes to efficient business, the Board of Directors of Global Power Synergy Public Company Limited appointed the Corporate Governance Committee to oversee activities related to corporate governance and business code of conduct, sustainability management, as well as social, community, and environmental activities. The Corporate Governance Committee currently comprises four members, namely Mr. Kurujit Nakornthap (Independent Director), serving as the Chairman of the Corporate Governance Committee, and Mrs. Nicha Hiranburana Thuvatham, (Independent Director), Mr. Bandhit Thamprajamchit, (Director), and Ms. Peangpanor Boonklum (Director), serving as members of the Corporate Governance Committee. In 2019, the Corporate Governance Committee convened a total of four meetings. The summary of its operations is provided below.

1. Reviewed the report of corporate governance and compliance performance for 2018 and endorsed the 2019 plan
 2. Reviewed the report of community, social, and environmental stewardship for 2018 and endorsed the 2019 plan
 3. Endorsed the CG Code compliance report for 2018 and disclosure of the deliberation summary in the annual report and Form 56-1
 4. Endorsed the policy and guidelines for corporate anti-corruption measures
 5. Reviewed the report of sustainable management of 2018 and endorsed the 2019 plan
 6. Endorsed the amendment made to the draft Corporate Governance Manual & Code of Conduct
 7. Reviewed the Board performance appraisal form for 2019.
- Awarded with an ESG 100 Certificate for the fourth consecutive year, given by the Thaipat Institute to listed companies recognized for their outstanding environmental, social and governance (ESG) performance and operating results, based on the sustainability data of SET-listed securities of 771 companies
 - For the second time, earned the Thailand Sustainability Investment (THIS) award for 2019, presented by SET based on outstanding environmental, social and governance (ESG), after passing selection based on assessment criteria
 - Won a Rising Star Sustainability Award for listed companies with outstanding sustainability businesses among those with Baht 30-100 billion in market capitalization (Tier 2), presented by SET
 - Won a Sustainability Disclosure Award from Thaipat Institute.

As a result of GPSC's commitment to corporate governance in its operation, GPSC's corporate governance and sustainability management has been recognized on the national level, as detailed below:

- Rated "Excellent" in the Corporate Governance Report of Thai Listed Companies (CGR) by the Thai Institute of Directors (IOD)
- Earned membership certification of the Collective Action Coalition of Thailand's Private Sector Coalition Against Corruption (CAC) in 2018, valid for three years from the approved certification date

On behalf of the Corporate
Governance Committee.

Mr. Kurujit Nakornthap

Chairman of the Corporate
Governance Committee



REPORT OF THE RISK MANAGEMENT COMMITTEE

Dear Shareholder,

Under Global Power Synergy Public Company Limited's business objective of becoming a national power leader that values timely and efficient management of business transformation under today's volatile circumstances, risk management has become its critical tools.

The Board of Directors has explicitly advocated risk management practices by appointing a Risk Management Committee (RMC) of five competent members from the Board, namely Mr. Payungsak Chartsutipol serving as the Chairman of the Risk Management Committee, Mr. Wittawat Svasti-Xuto, Mr. Kongkrapan Intarajang, Mr. Wirat Uanarumit, and Mr. Chawalit Tippawanich serving as member of the Risk Management Committee. The RMC operates under its charter as assigned by the Board and the Enterprise Risk Management (ERM) scope in line with the COSO ERM 2017 and ISO 31000:2009 international standards.

This year was one of challenges arising from GPSC's exponential growth, thanks to the acquisition of Glow Energy Public Company Limited in GPSC's pursuit of revenue security in response to business growth as well as integrated production and distribution of public utilities in Rayong. To drive these tasks to success, RMC valued comprehensive examination of all aspects in all steps of operation from 2018 to 2019. A total of 14 meetings were held during the period to the end of the acquisition, excluding close monitoring of the acquisition and its implications. As a result, resounding success was evident in the acquisition, benefiting all stakeholders as planned.

Thanks to the value given to ERM and project investment risks this year, GPSC held a total of eight RMC meetings, with perfect attendance by all members, who executed their duties under the assigned roles as highlighted below.

1. To establish and review GPSC's enterprise risk management framework to ensure appropriateness and correspondence with business strategy.
2. To oversee, support, track, assess, and make recommendations on risk management execution embracing all aspects of risks, including ESG, project, and emerging risks, to ensure that GPSC's business is carried out with manageable risks. To promptly mitigate potential losses, GPSC's approach for setting control measures and mitigation plan is explicit and practicable.
3. To review and provide suggestions on the 2019 corporate risk profile in correspondence with the company's business directions, strategic plans, and business goals.
4. To report the result of enterprise risk management to the Board of Directors.

On behalf of
the Risk Management Committee



Mr. Payungsak Chartsutipol
Chairman of
the Risk Management Committee



RAISING PERSONNEL CALIBER BY INNOVATION CULTURE

TO PROPEL
THE CORPORATION TOGETHER

AWARDS AND RECOGNITIONS



01

Certification of Green Meetings for the Year 2019
Thailand Business Council for Sustainable

02

CSR-DIW Continuous Award 2019
Department of Industrial Works

03

Asia Responsible Enterprise Award 2019 (in the Category of Green Leadership Award)
Enterprise Asia

04

CFO of the Year Award 2019 in Treasury, Trade, Supply Chain and Risk Management
The Asset

05

Sustainability Disclosure Award 2019
Thaipat Institute

06

Thailand Voluntary Emission Reduction Program: T-VER 1 Project, Low Emission Support Scheme: LESS 8 Projects
Thailand Greenhouse Gas Management Organization (Public Organization)

07

Certificate of "Reducing Global Warming by Cool-mode, Number 5 Power-Saving Clothes"
Thailand Textile Institute and Thailand Greenhouse Gas Management Organization (Public Organization)

08

Prime Minister Road Safety Awards 2019. The company was granted the award as it was classified as a company, which is outstanding in focusing on road safety
Provincial Traffic Accident Prevention Support Office



09

Best Cross-Border M&A Deal Thailand from The Asset Triple A Country Awards 2019

The Asset

10

Platinum Award Winners from The Asset ESG Corporate Awards 2019

The Asset

11

Low-carbon Industrial Factory
Thailand Greenhouse Gas Management
Organization (Public Organization)

12

Thailand Sustainability Investment 2019

The Stock Exchange of Thailand

13

Best Initiative in Innovation: Energy Storage System (ESS) from The Asset ESG Corporate Awards 2019

The Asset

14

Rising Star Sustainability Awards

The Stock Exchange of Thailand

15

Best Investor Relations Team Award from The Asset ESG Corporate Awards 2019

The Asset

16

Plaque of Honor for Participation in the Project to Create Database for Resource Sharing (RECP) and Enhancing Industrial Plants in Eco-industrial Cities

Department of Industrial Works



POLICY AND BUSINESS OVERVIEW

VISION, MISSION, AND STRATEGY

Global Power Synergy Public Company Limited (GPSC) is the power flagship of PTT Group, GPSC is committed to establishing energy and public utility security in support of domestic industrial growth, a crucial foundation of national growth and sustainable national development. GPSC also pursues opportunities for investment in power projects in domestic and international markets to grow sustainably, while developing energy storage technology to become a leading global power company in innovation and sustainability with the following Vision and Mission Statements.



VISION



THE GLOBAL LEADING INNOVATIVE AND SUSTAINABLE POWER COMPANY



MISSION

- **Generate long - term value addition for shareholders together with steady profit growth**
- **Deliver to customers reliable power and utilities through operational excellence**
- **Conduct business with community, social, and environmental responsibility**
- **Seek innovation in power and utility efficiency management through energy storage technology**



BUSINESS STRATEGIES

Under today's fast - changing environment, GPSC has adopted three main business strategies to strive for long - term corporate goals.

1. S1: SYNERGY & INTEGRATION Manage all assets with synergy and integration to strengthen the base and forge ahead with unity, agility and strength to cope with such transformation as well as short - term and long - term business growth plans. Under the Synergy Initiatives to significantly grow business performance outcomes, GPSC pursued the acquisition of Glow Energy Public Company Limited to create synergy value with the Strategy S1 and its three main components as follows:

- **Asset Integration:** Generate additional co - value from integrated asset management, including network system integration, transmission system integration and steam network interconnection, integrated demand and supply optimization for existing and new power and steam sales agreements, integrated system efficiency and planning management, procurement bundling, management of long - term service agreements and maintenance programs (LTSA & spare parts pooling), and overinvestment saving for new power plants.
- **Business Integration:** Integrate work processes of both organizations to minimize duplications and expenses and optimize work efficiency.
- **People Integration:** Integrate human resource management systems of both organizations toward a synchronized solidified organization with a harmonized culture.



2. S2: SELECTIVE GROWTH Expand businesses and grow power generating capacities in Thailand and overseas through investments aligned with business strategies, risk and investment decision criteria under the following investment schemes:

- **Go along with PTT Group:** Seek investment opportunities for power projects along with PTT Group in Thailand and abroad to strengthen the group's competitiveness with its specific expertise on power generation in the overall value chain. The Gas to Power project exemplifies delivery of additional power to customers in Map Ta Phut and Eastern Economic Corridor (EEC) areas to sustain national industrial development.
- **Domestic & International:** Seek investment opportunities for power projects in domestic and international markets. Examples are investments identified under the Thailand Power Development Plan 2018 (PDP2018) and investments in target countries.
- **Renewable Energy:** Develop renewable - power plant businesses, including large - scale renewable power plant business development in Thailand and overseas, as well as Solar Private Power Purchase Agreement Development.

3. S3: S - CURVE Investment in innovation to generate revenue from new business models develop New S - Curve businesses to cope with energy transformation to become the PTT Group's flagship energy solution provider through three new business development initiatives as follows:

- **Energy Storage Business:** Develop its business to become an energy storage system integrator (ESS) capable of integrating the system with renewable energy sources and enhancing transmission system reliability.
- **Battery Manufacturing:** Invest as a pioneer in prototype battery manufacturing in Thailand. GPSC is currently conducting market survey, including identification of customer segments and refining business models.
- **Energy Management System:** Conduct studies, analyses and selection of compatible technologies with the New Energy Market to shape new business opportunities such as peer - to - peer trading, demand & supply aggregator, demand response, and EV charger.

SUSTAINABILITY MANAGEMENT

POLICY ON SUSTAINABILITY MANAGEMENT

GPSC Group strives to become PTT Group's power and utility flagship. Guided by the principles of sustainable development, it seeks to foster trust among all stakeholders, achieve operational excellence and transparency, ensure continuous development, as well as demonstrate its responsibility to communities, society, and the environment, all undertaken in compliance with PTT Group's sustainability management guidelines, the National Strategy, and relevant international sustainable practices in pursuit of UN's Sustainable Development Goals (SDGs). GPSC's sustainability management policy is described below.

1. Comply with any relevant laws and requirements in the country where it operates and respect international practices
2. Take into consideration the economic, social, and environmental balance as well as all stakeholders involved in the operation for the sustainable growth of the business.
3. Foster awareness of GPSC's sustainability management policy among its suppliers and customers as well as promote the adoption of relevant guidelines to enhance the Company's operation and minimize impact throughout the value chain.
4. Promote regular development of innovations and technologies to achieve sustainable benefits for communities, society, and the environment.
5. Promote respect for and protection of the rights of the stakeholders, human rights, and the labor rights of employees and business partners in the Company's practices and business operations.
6. Strive to use expertise in electricity to contribute to a better quality of life in communities, which will lead to the sustainability of society at large
7. Disclose the Company's policies, management practices, and performance with transparency, accountability, and fairness as well as set an example of behaviors that contribute to sustainable business culture.

POLICY ON COMMUNITY, SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

GPSC has a firm intention to conduct business with responsibilities for all stakeholders, both within and outside the organization, namely staff, 1) shareholders, 2) investors, 3) relevant government and other agencies, 4) employees, 5) suppliers and contractors, 6) business partners, 7) customers, and 8) communities and society. Included in this intention are sustainable responsibilities for communities, social and the environment. GPSC hopes for peaceful co-existence between the business and community, society and environmental. In parallel, GPSC promotes appropriate stakeholder engagement. The policy regarding community, social and environmental responsibilities includes:

1. Conduct a transparent, fair, and auditable business with an emphasis on growth in parallel with the development of staff's quality of life, communities, society, and the environment, while protecting stakeholders' benefit according to the company's vision
2. Realize the optimal use of natural resources with the least impact on stakeholders, society, communities, and the environment
3. Be determined to conduct business with responsibilities for community, society and the environment, as well as all stakeholders to foster community, social and environmental sustainability
4. Encourage and provide opportunities for stakeholders to take part in projects or activities that benefit community, society and the environment using GPSC's resources to attain goals
5. Communicate and make known projects or activities initiated for the benefit of community, society and the environment with communities, society and stakeholders.

DEVELOPMENT AND SIGNIFICANT CHANGES IN 2019

MAR

- GPSC acquired 1,010,976,033 shares in Glow Energy Public Company Limited (GLOW), representing 69.11 percent. It is obliged to make an offer for the remaining 451,889,002 shares, representing 30.89 percent of the total issued shares. GPSC made a mandatory tender offer on May 22, 2019 for the remaining securities amounting to 26.14 percent.

Acquired in GLOW

69.11%

APR

- GPSC invested in the Energy Recovery Unit by purchasing the Energy Recovery Unit (ERU), which was part of the Clean Fuel Project (CFP) of Thai Oil Public Company Limited, to accept the transfer of ownership of the ERU project from Thai Oil. The ERU construction and the issuance of the Provisional Acceptance Certificate (PAC) are expected to be completed in the third quarter of 2023.

JUL

- Nam Lik 1 Power Company Limited (NL1PC), owned by GPSC 40% was representing 26 megawatts of the installed capacity. NL1PC is a hydroelectric run-of-river power plant located in Lao People's Democratic Republic and has commenced commercial operation with a 25-year power purchase agreement of 65 megawatts with Laos Electricity Authority (EDL).

AUG

- GPSC held Extraordinary General Meeting of Shareholders No. 1/2019 to request an approval to increase the registered capital of THB 13,214,285,710, made up of new registered capital of THB 28,197,293,710 for common shares not exceeding 1,321,428,571 shares with a par value of THB 10 per share, which totaled THB 13,214,285,710 in rights offering for existing shareholders. Each shareholder can subscribe to the newly issued ordinary shares over his or her rights at the ratio of one existing common share to 0.8819 new shares for an offered price of THB 56 per share.

SEP

- Central Utility Plant 4 (CUP-4), a cogeneration power plant and gas-fired steam production unit located in the Asia Industrial Estate, Rayong, commenced commercial operation. GPSC holds all shares in this unit with a capacity of 45 megawatts of electricity and 70 tons per hour of steam.

OCT

- GPSC completed its capital increase plan for existing shareholders by THB 74,000 million on October 9. It allotted 1,321,428,567 common shares at THB 56 per share, currently resulting in a total of 2,819,729,367 common shares, and thus has boosted its registered capital to THB 28,197,293,710.
- Xayaburi Power Company Limited (XPCL), a hydropower plant located in Xayaburi Province, Lao's People Democratic Republic, with an installed capacity of 1,285 megawatts, started distributing 1,220 megawatts to EGAT and 60 megawatts to Lao electricity state enterprise, thus beginning its 29-year power purchase agreement with EGAT. GPSC holds 25% of the shares, equivalent to 321 megawatts of installed capacity. Commercial operation has commenced.

NOV

- Chonburi Clean Energy Company Limited (CCE), operator of a power plant fueled by industrial waste located in the WHA Chonburi 1 Industrial Estate with a gross capacity of 8.6 megawatts, started commercial operation. CCE was a joint venture between Glow IPP 3, WHA Energy, and Suez (South East Asia). GLOW held 33% shares, equivalent to about 2.8 megawatts of installed capacity.
- GPSC issued six sets of debentures totaling THB 35,000 million to institutional investors and major investors with an average interest rate of 2.80 percent per annum. The rating given by TRIS Rating Co., Ltd. (TRIS), of the debentures was AA-. The funds received will repay short-term loans, which follows GPSC's financial restructuring plan, for the acquisition of GLOW.

DEC

- GPSC made an offer for all outstanding securities of GLOW, ending on December 2, 2019, and successfully delisted the securities from SET on December 13, 2019. As of December 31, 2019, GPSC therefore held a total of 1,460,360,024 shares acquired from GLOW, or 99.83 percent of the total issued and sold shares.
- SET officially delisted GLOW's common shares, effective from December 13, 2019, onward.

BUSINESS OVERVIEW AND SHAREHOLDING STRUCTURE

BUSINESS OVERVIEW

GPSC engages primarily in the production and distribution of electricity, steam, industrial water, and public utilities. As of December 31, 2019, its equity capacities were 5,026 megawatts of power generation, 2,876 tons per hour of steam, 7,372 cubic meters per hour of industrial water, and 15,400 refrigerated tons of chilled water, as detailed below.

PRODUCT¹

As of December 31, 2019

	TOTAL CAPACITY ²	
	TOTAL	COD
Electricity (MW)	5,026	4,708
Steam (T/H)	2,876	2,698
Industrial Water (Cu.m./H)	7,372	7,372
Chilled Water (RT)	15,400	15,400

Remark:

¹ Units of power in megawatts (MW), steam in tons per hour (T/H), industrial water in cubic meters per hour (Cu.m./H), and chilled water in refrigerated tons (RT)

² Including Glow's equity capacity of about 100 percent and planned capacity of Global Renewable Power Co., Ltd. (GRP), in which investment was approved with the exception of certain outstanding terms.



• Under Construction

Other investment and joint ventures in the power and other businesses appear below:

1. GPSC-operated natural gas-fired power plants already in commercial operation:

Gas - fired Power Plants:

- Sriracha combined - cycle power plant located in Sri Racha district, Chon Buri province
- Cogeneration power plants and steam production units: Central Utility Plants (CUP 1-4) located in Hemaraj Eastern Industrial Estate in Map Ta Phut district, and Asia Industrial Estate, Rayong province.

2. Power plants invested through Glow Energy Public Company Limited, with power, steam and utilities generation from other energy forms as detailed below:

Natural Gas -fired and Coal -fired:

- Glow IPP, located in WHA Chon Buri Industrial Estate 1
- GHECO-One, located in Map Ta Phut Industrial Estate
- Glow Energy Phase 1-2, located in Map Ta Phut Industrial Estate
- Glow Energy Phase 4, located in Map Ta Phut Industrial Estate
- Glow Energy Phase 5, located in Map Ta Phut Industrial Estate
- CFB 3, located in Map Ta Phut Industrial Estate
- Glow SPP 2/Glow SPP 3, located in Map Ta Phut Industrial Estate
- Glow SPP 11 Phase 1, located in Siam Eastern Industrial Park
- Glow SPP 11 Phase 2, located in Siam Eastern Industrial Park
- Glow SPP 11 Phase 3, located in Siam Eastern Industrial Park.

Renewable -energy Power Plants, namely:

- Glow Energy Solar, located in Asia Industrial Estate
- Glow Energy Rooftop, located in the Siam Michelin Plant, WHA Saraburi Industrial Land, Nong Khae district, Sara Buri province
- Glow Energy Rooftop, located in the Continental Automotive (Thailand) Plant, located in Amata City Rayong Industrial Estate, Rayong province
- Chonburi Clean Energy, fired by industrial waste and located in WHA Chonburi Industrial Estate 1.

Hydropower Plants:

- Houay Ho, located in Attapeu province, Laos.

3. Domestic and overseas joint - venture power plants engaging in power generation and distribution, based on energy forms, consisting of:

Natural Gas -fueled Power Plants

- Ratchburi Power Company Limited
- IRPC Clean Power Company Limited
- Nava Nakorn Electricity Generating Company Limited
- Bang Pa-In Cogeneration Company Limited
- Combined Heat and Power Producing Company Limited

Renewable -energy Power Plants, namely:

- Ichinoseki Solar Power (ISP1) GK
- Thai Solar Renewable Company Limited, which holds shares in Siam Solar Energy 1 Company Limited
- Combined Heat and Power Producing Company Limited (on-ground solar energy power plant in collaboration with Chantaburi's Shrimp Farmers Cooperative Limited)

Hydropower Plants, namely:

- Natee Synergy Company Limited, which holds shares in Xayaburi Power Company Limited
- Nam Lik 1 Power Company Limited



4. Power plants under GPSC's ongoing investment or construction, as detailed below:

- Energy Recovery Unit (ERU), designed to serve as a public utility support unit for processes under Thai Oil (TOP)'s Clean Fuel Project (CFP), with 250 megawatts and 175 tons per hour of steam in capacity. ERU's main fuel is the oily liquid by product of CFP's distillation. Once the construction project is completed, GPSC or a subsidiary will be taking transfer of the ERU project. It has won a provisional acceptance certificate (PAC) under the project. Completion of the transfer is expected in the third quarter of 2023.
- Rayong Waste to Energy (WTE) management project, consisting of two subprojects located in Rayong province. Refuse-Derived Fuel (RDF) has seen its construction completed. The power plant from RDF, with a capacity of 9.8 megawatts, is under construction; commercial distribution of power is scheduled for the second quarter of 2021.
- Solar farms in Thailand with a combined capacity of 39.5 megawatts, with investment to be made through Global Renewable Power Company Limited. The business purchase is pending complete purchase terms.

5. Other business, totaling 5 companies:

- GPSC International Holdings Limited in Hong Kong SAR, People's Republic of China – to accommodate overseas investment
- 24M Technologies, Inc. in USA, a company engaging in research and development of batteries for energy storage for the industrial sector and power transmission systems for the enhanced security of power distribution, power network, and power user systems.
- Business Services Alliance Company Limited, engaging in service and administration of human resources for PTT Group's outsourcing and having acquired the shares of Sport Services Alliance Company Limited, which operates the football management business of PTT Group.
- Sarn Palang Social Enterprise Company Limited (SPSE), formed to support PTT's and PTT Group's social enterprises striving to join in the efficient resolution of problems facing communities, society, and the environment while advocating hiring of local labor on the basis of sustainability.
- Global Renewable Power Company Limited (GRP), a subsidiary formed to accommodate investment growth in renewable - energy power plants worldwide under GPSC's strategic plans.



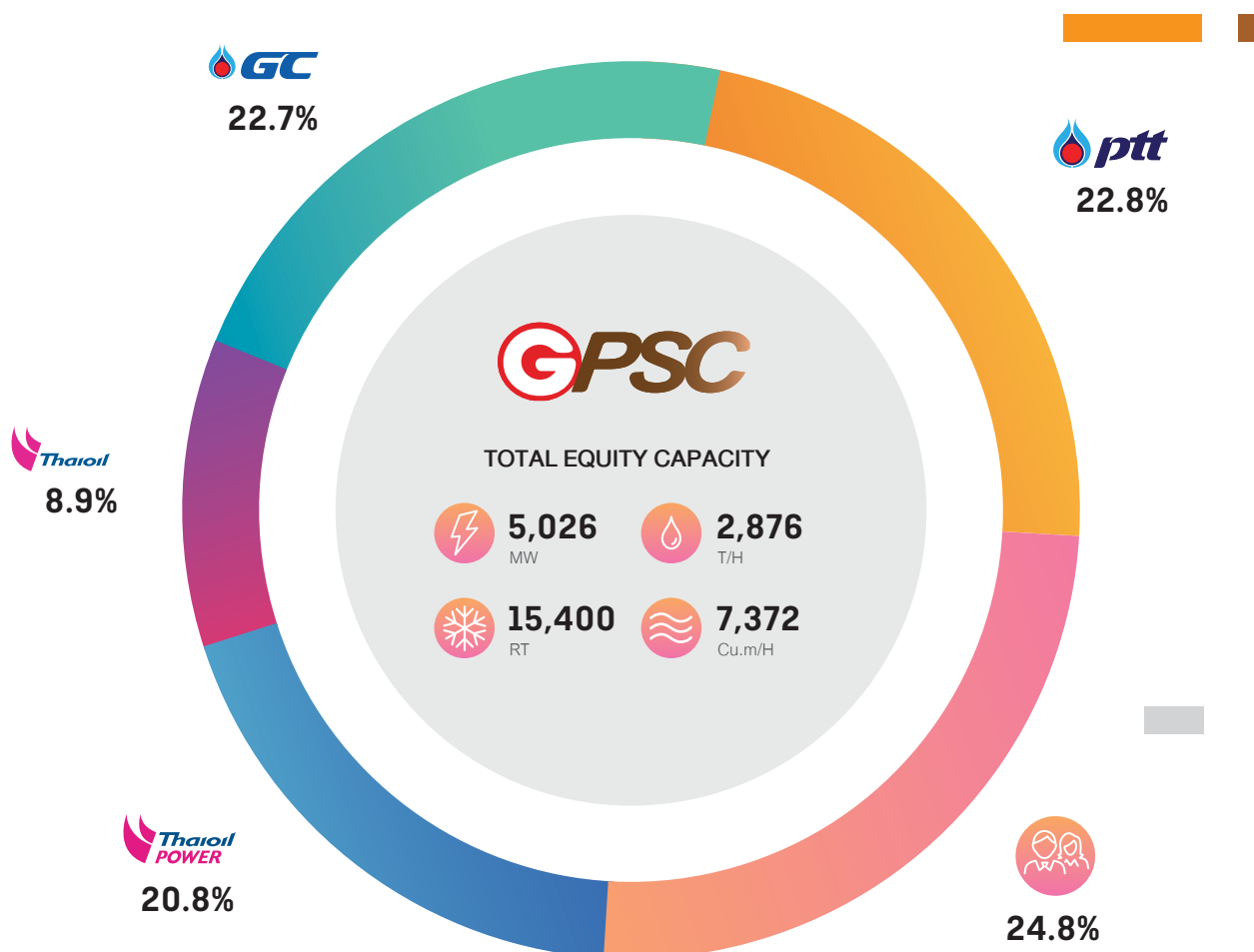
STRIVING TO BECOME ASIA'S POWER BUSINESS LEADER

WHILE NURTURING SUSTAINABLE ENERGY SECURITY
IN TANDEM WITH STAKEHOLDERS'S BENEFIT.



GPSC'S SHAREHOLDING STRUCTURE

As of December 31, 2019; GPSC holds shares in 36 companies, comprising 21 subsidiaries, 4 joint ventures, 5 associated company, and 4 long-term investments.



SRIRACHA POWER PLANT

700 MW
80 Cu.m./H

RDF Power Plant

9.8 MW

CENTRAL UTILITY PLANTS IN RAYONG (CUP)

TOTAL CAPACITY OF ALL CUP

399 MW
1,410 T/H
2,000 Cu.m./H

CUP-1 **226 MW**
890 T/H
720 Cu.m./H

CUP-2 **113 MW**
170 T/H
510 Cu.m./H

CUP-3 **15 MW**
280 T/H
770 Cu.m./H

CUP-4 **45 MW**
70 T/H

Power Installed Capacity Grouped By Products



Power



Steam



Chilled Water

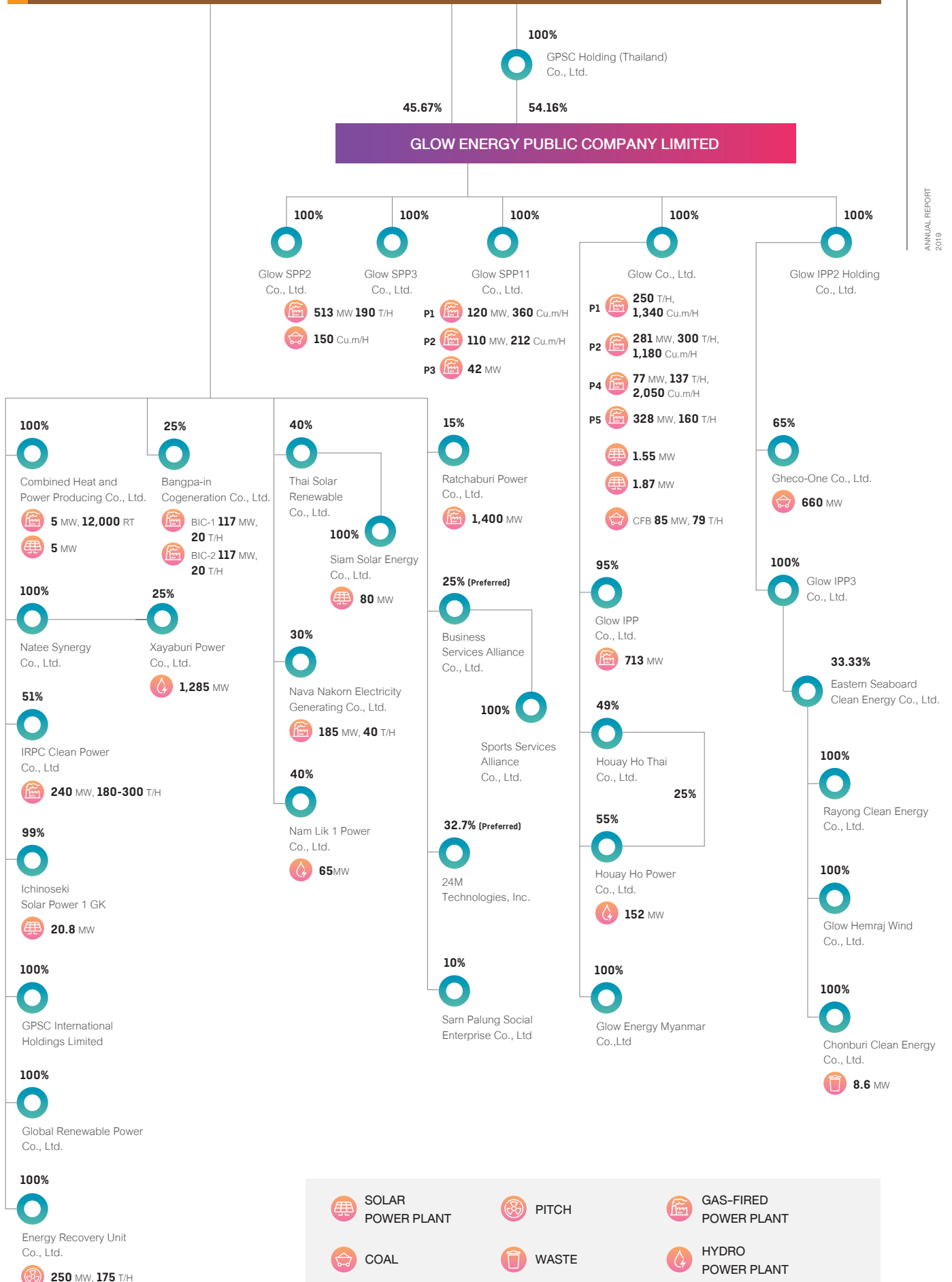


Industrial Water



Project Under Construction

Remark: MW: megawatts T/H: tons/hour RT: refrigeration tons Cu.m./H: Cubic meters per Hour



NATURE OF BUSINESS OPERATIONS

REVENUE STRUCTURE

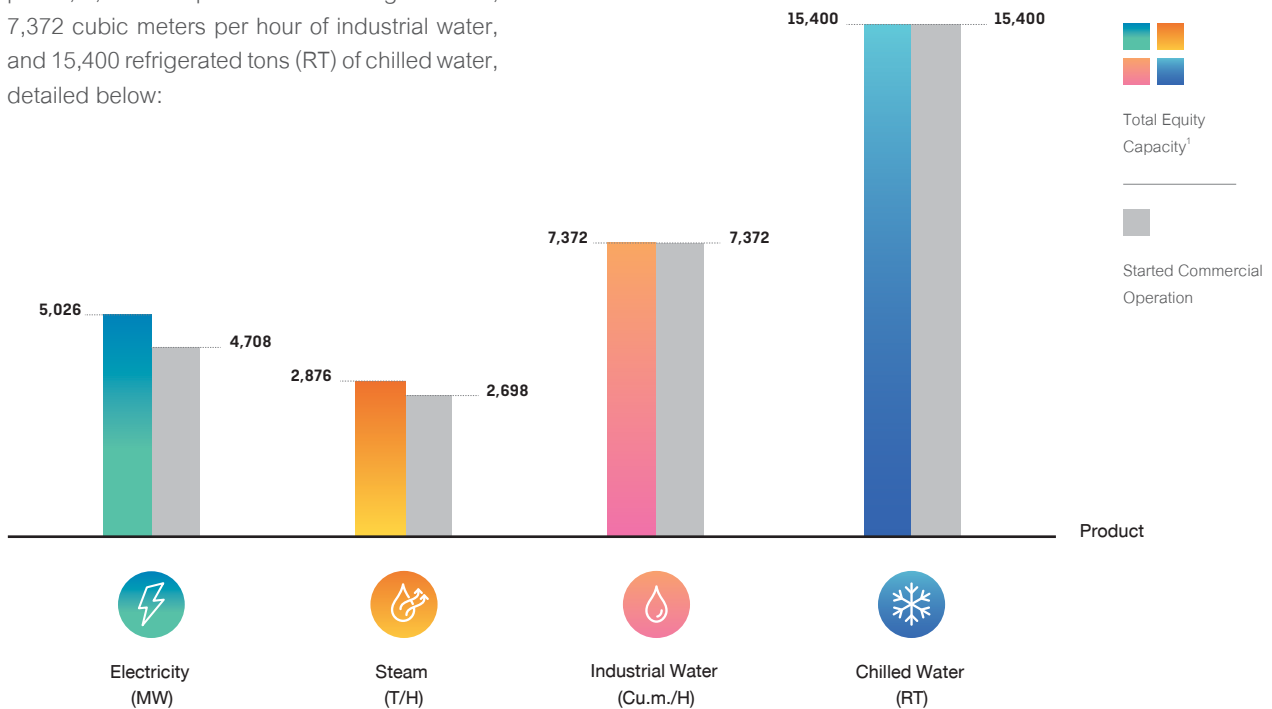
GPSC's majority of revenues are derived from sales of power, steam, industrial water, financial leases, and dividends received from Ratchaburi Power Company Limited

PRODUCT/SERVICE	OPERATOR	YEAR ENDED 31 DECEMBER					
		2560 (2017)		2561 (2018)		2562 (2019)	
		REVENUE (THB Million)	%	REVENUE (THB Million)	%	REVENUE (THB Million)	%
REVENUE FROM GOODS AND SERVICES							
Power	IPP	3,828	18%	3,241	13%	14,940	22%
	SPP	8,135	39%	12,771	51%	35,627	53%
	VSPP	42	0%	321	1%	348	1%
	Total	12,005	58%	16,333	65%	50,915	75%
Steam	SPP	6,873	33%	7,297	29%	13,835	21%
	Total	6,873	33%	7,297	29%	13,835	21%
Industrial Water / Chilled Water	IPP	-	0%	6	0%	56	0.1%
	SPP	268	1%	309	1%	631	0.9%
	VSPP	175	1%	187	1%	203	0.3%
	Total	443	2%	502	2%	890	1%
Services	VSPP	4	0.02%	97	0.4%	30	0.04%
	Total	4	0.02%	97	0.4%	30	0.04%
RDF Waste Fuel	RDF	-	0%	4	0.02%	16	0.02%
	Total	-	0%	4	0.02%	16	0.02%
TOTAL REVENUE FROM GOODS AND SERVICE		19,325	93%	24,233	96%	65,686	97%
REVENUE FROM FINANCIAL LEASES							
Financial Leases	IPP	592	3%	543	2%	773	1%
TOTAL REVENUE FROM FINANCIAL		592	3%	543	2%	773	1%
OTHER REVENUE							
Nitrogen	GPSC	108	1%	103	0.4%	103	0.2%
Dividend Received	GPSC	270	1%	135	1%	185	0.3%
Other Revenue	GPSC	478	2%	286	1%	733	1.1%
TOTAL OTHER REVENUE		856	4%	524	2%	1,021	1.5%
TOTAL REVENUE		20,773	100%	25,300	100%	67,480	100%

EQUITY CAPACITY

Equity capacity as of
December 31, 2019

As of December 31, 2019, GPSC commanded equity capacity of 5,026 megawatts in power plants, 2,876 tons per hour of steam generation, 7,372 cubic meters per hour of industrial water, and 15,400 refrigerated tons (RT) of chilled water, detailed below:



Remark:

¹ Including Glow's equity capacity of about 100 percent and the planned capacity of Global Renewable Power Co., Ltd. (GRP), for which investment was approved with the exception of certain outstanding terms.

PRODUCT FEATURES



ELECTRICITY

is a form of energy which is processed for other useful purpose, including power for industrial processes, commerce, and public utilities, delivered to various destinations through transmission lines under various voltages: 230, 115, or 22 kV.



STEAM

is a form of thermal energy derived from surplus heat of power generation; sometimes it is obtained by direct fuel combustion, Steam supplied to customers are of several pressure and temperature levels to meet customers' demand.



INDUSTRIAL WATER

is processed water meeting assorted quality requirements, including clarified water and demineralized water. Both products form part of the power generation process, delivered to customers' processes.



CHILLED WATER

is a heat transfer medium for air conditioning systems or production processes.



NITROGEN

is an inert gas with the chemical formula N₂ and is a liquid at -196 oC. The company is a supplier and delivers nitrogen products to industrial customers via pipelines.

BUSINESS HIGHLIGHTS

1. POWER FLAGSHIP OF PTT GROUP

Under PTT Group's vision to become Thailand's premier multinational energy company, the group drives a variety of business strategies, of which the power business is its core business in addition to oil, natural gas, and petrochemical businesses. Therefore, as the group's flagship company, GPSC focuses on continued growth and sustainability along with new business ventures into foreign markets.

2. STRATEGIC ADVANTAGES DUE TO LOCATIONS, CUSTOMER GROUPS, AND A VARIETY OF FUELS, AND A BALANCED OPERATING STATUS OF INVESTED POWER PLANTS.

Today, GPSC's power plants continue to grow in terms of locations, customer groups, and fuel types, which contribute to its risk diversification, as described below.

- **Locations:** GPSC's power plants and invested companies are scattered across many provinces of Thailand, with some located overseas, which helps mitigate the risk of over-reliance on any given area's or country's power demand.
- **Customer Groups:** GPSC and its invested companies sell power to industrial customers and public agencies, including the Electricity Generating Authority of Thailand (EGAT), the Provincial Electricity Authority (PEA), the and Metropolitan Electricity Authority (MEA). In addition, it sells power generation byproducts to industrial customers in nearby areas, preventing over-reliance on any single customer.
- **Fuel Types:** GPSC and its invested companies plants include conventional power plants, hydro power plants, and renewable power plants. This diversification helps prevent over-reliance on any type of fuel.

The operating status of its invested plants shows that GPSC owns a number of operating commercial power plants that are already generating revenue, while some are under construction and are set to provide a top-up when ready for commercial operation in the near future.

3. UNCONVENTIONAL BUSINESS OPPORTUNITIES

Apart from GPSC's core businesses of power generation and utility, GPSC's policy is to relentlessly seek new business opportunities to grow further from power generation and distribution, including the power storage system and battery business. GPSC invested in 24M Technologies, Inc. (24M), an R & D company that has conducted research and development projects on the production of lithium-ion batteries for use as a backup power storage system for industries and enhancement of the security of power distribution and power grid systems. If 24M's R & D efforts pay off and lead to a commercial production, GPSC will gain access to advanced battery technology at a lower cost than batteries currently commercially marketed. The focus will be on the application of such technology to downstream businesses to supplement value to GPSC's present businesses.

DISTRIBUTION AND TARGET CUSTOMER GROUPS

DISTRIBUTION

As a rule, power is transmitted from the generator with the same voltage standard as that used by PEA and MEA with transformers located at substations. Power then travels through transmission lines and sales meters before entering the grids of EGAT, PEA, MEA, and industrial customers.

GPSC's products consist of power, steam, and industrial water, which are practically not storable for subsequent consumption. As a result, distribution and delivery systems are critical, and their reliability are highly demanded. Recognizing this, GPSC has designed separate transmission systems for of individual customers, which guarantees consumption control and safety for each individual customer. To ensure product delivery efficiency, the locations of the company's power plants are also crucial. That is, they must be located in industrial areas where demand for steam, chilled water, and industrial water for production exists and near power plants. The product must also delivered through transmission systems with additional insulation to reduce loss of energy to the external surroundings.

TARGET CUSTOMER GROUPS

GPSC's target customer groups can be classified by supply chain into two groups as follows:

1. Distributed to EGAT and PEA or MEA for Resale of Certain Portions

Under Thailand's power structure, EGAT is responsible for the generation, sourcing, and transmission of power to PEA and MEA, both of which distribute it to the industrial sector and the retail. All three agencies are responsible for national power security. Since EGAT's power generation is insufficient, it purchases power from private producers through three main types of agreement. Independent Power Producer: IPP, Small Power Producer: SPP, Very Small Power Producer: VSPP

GPSC and its invested companies distribute power to EGAT, PEA, and MEA through the three types of agreement. In its distribution to EGAT, GPSC also commands reserve power under reserve power agreements, which further enhances the security of its power plants' power generation systems.

- **Product Pricing:** Rates of power purchase are dictated by the power tariff structure, grouped by power producer type.

1) Independent Power Producer (IPP)

As a rule, IPP agreements break the main pricing structure down into two parts.

First: Availability Payment (AP) is the compensation paid by EGAT to power plants each month for maintaining their power distribution availability regardless of the volume actually purchased by EGAT. AP is made up of:

- APR1: is the compensation paid by EGAT for plant construction, which includes loan repayment and GPSC's returns (also called "Capacity Cost")
- APR2: is the compensation paid by EGAT for fixed expenses in operating and maintenance (also called "fixed O & M").

Second: Energy Payment (EP), to be designated by IPPs to reflect their variable production costs

2) Small Power Producer (SPP)

SPPs' pricing varies with fuel types and agreement types.

2.1) **Firm agreement pricing** Non-firm agreements are power purchase agreements with specified volumes of power to be distributed to EGAT through a period of up to five years. Such agreements do not qualify for capacity payment (CP) and are only entitled to Energy Payment (EP), to be determined from the energy cost for power generation, operating cost, and short-run avoided energy cost. As such, non-firm prices are always lower than firm ones. As for power purchase from renewable-energy power plants, an adder (a premium-like component) or feed-in tariff (FiT) also applies.

2.2) **Non-firm agreement pricing**

Non-firm agreements are power purchase agreements with specified volumes of power to be distributed to EGAT through a period of up to five years. Such agreements do not qualify for capacity payment (CP) and are only entitled to Energy Payment (EP), to be determined from the energy cost for power generation, operating cost, and short-run avoided energy cost. As such, non-firm prices are always lower than firm ones. As for power purchase from renewable-energy power plants, an adder (a premium-like component) or feed-in tariff (FiT) also applies.

3) Very Small Power Producer (VSPP)

By its definition, VSPPs supply up to 10 MW to PEA or MEA under each agreement. The applied pricing is dictated by the wholesale power price structure at the similar voltage where VSPPs connects to the power system plus the average wholesale Ft. if the power is derived from renewable energy, an adder or FiT also applies, in line with PEA's or MEA's announcements.

2. Direct Sales to Industrial Customers

GPSC, as a public utility (power, steam, chilled water, and industrial water) producer, sells products to its industrial customers, most of whom are in the petrochemical business. As a one-stop service provider, the company also sells and distributes nitrogen to PTT Group companies

• Product Pricing

1) Industrial customers' power purchase rates

GPSC has entered into long-term sales agreements with its industrial customers, most of whom operate industrial plants, based on the PEA prices and subject to changes in Ft according to fuel cost.

2) Steam and industrial water pricing

Steam prices and industrial-water prices are of the cost-plus type: a function of generation fuels, other cost components, and a certain profit margin. The price formula takes into account variations in costs in adjusting prices to reflect actual production costs, which normally include investment, variable costs, and operation and maintenance expenses involved in the investment of the distribution system dedicated to each customers. As for energy losses, separate calculation applies to account for different investment amounts required for system construction as a result of differences in volumes to be delivered and in customers' locations.

General Pricing Terms

GPSC Board of Directors has defined criteria and principles for determining standard selling prices to ensure fairness and transparency in sales to connected customers and other customers, both of which must enjoy the same standard.

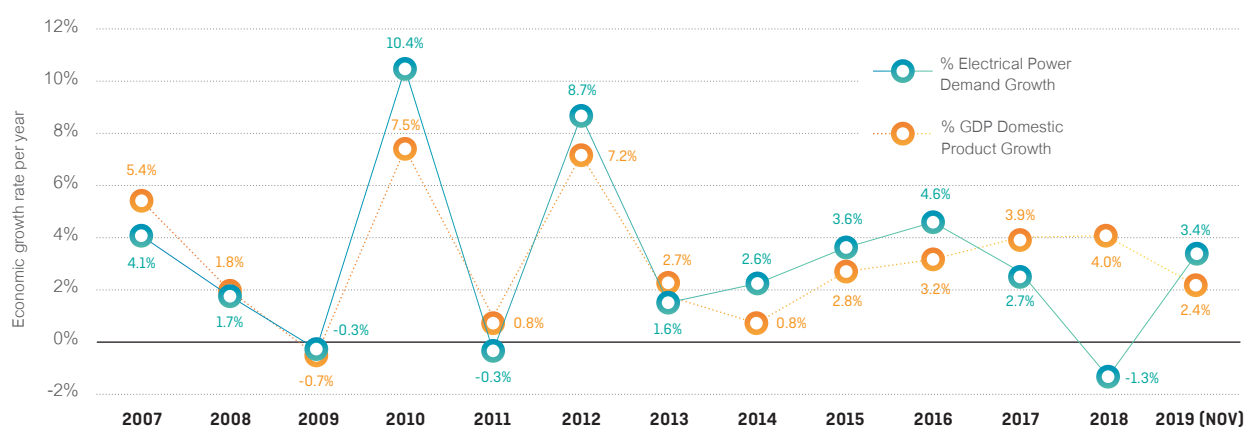
MARKET AND COMPETITION

OVERVIEW OF THAILAND'S DEMAND AND POWER GENERATION CAPACITY IN 2019

Thailand's total installed electricity generating capacity currently stands at 47,260 megawatts, excluding capacities from independent power suppliers (IPs). As of September 2019, the overall electrical power demand was 146,773

gigawatt-hours, 4.3% up from the same period of 2018. This higher demand reflected economic expansion in certain areas, notably in tourism, and increasing gross domestic product (GDP) of 2.4% in 2019.

POWER CONSUMPTION AND GROSS DOMESTIC PRODUCT (GDP) DURING 2007 – 2019



Source: Energy Policy and Planning Office (EPPO), Ministry of Energy and Office of the National Economic and Social Development Council (NESDC)

The national peak demand for electricity in 2019 was 37,312 megawatts, recorded on May 3 at 14:27 hours, 8.7% up from 2018. The peak demand recorded by the power authorities was 32,273 megawatts, 7.7% up from 2018. These increases were driven by higher demand for electricity outside the systems controlled by the state authorities, such as power generated by industrial operators for their own use and solar rooftops. These changes in power generation and consumption patterns have affected the power market mechanism and will inevitably alter the competitive power business in the near future.

THAILAND POWER DEVELOPMENT PLAN B.E. 2561 (PDP2018)

The national power development plan (PDP) is updated every 3-5 years in keeping with changes in factors affecting power generating capacity, such as changes in power demand forecast reflecting economic growth, measures promoting energy security, and promotion of renewable energy. These parameters are incorporated with the plan for future power plants. The new plan also incorporates disruptive energy technological changes which drive transformation of the energy consumption pattern and behavior. Below are highlights of power development planning.

1. Power Demand Forecast

The original power demand projections were calculated and projected from two main variables: gross domestic product or national economic growth and historical power consumption. The current forecast incorporates additional variable factors, including power supply from independent power suppliers (IPSSs) or power generation from producers for their own use and then delivered to the national grid, leading to a more accurate power demand forecast. The current forecast is extrapolated for each region instead of nationwide, enhancing the planning process to reflect the existing energy infrastructure and potential energy sources in each region, leading to higher energy security and supply.

2. Additional Capacity Power Planning

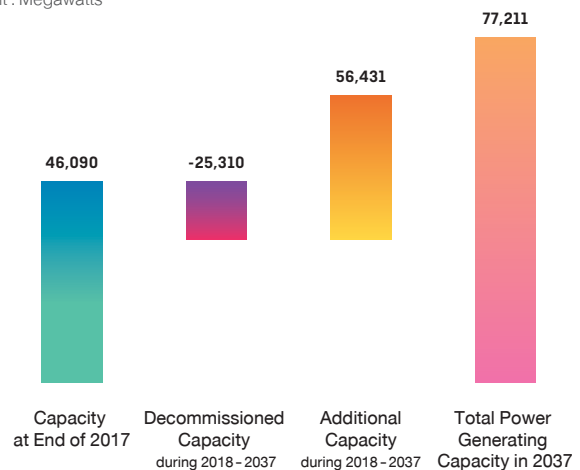
There are three main components in the fundamental of the new power development planning process.

- 1) **Security:** Ensuring power supply with top priority on power security and balance of supply by region, with additional main power plant investment allocation at an appropriate size.
- 2) **Price:** Pushing for lower cost of power generation to maintain the retail tariff.
- 3) **Environment:** Promoting generation of power from renewable sources and developing a Smart Grid system to accommodate a shift toward prosumer markets.

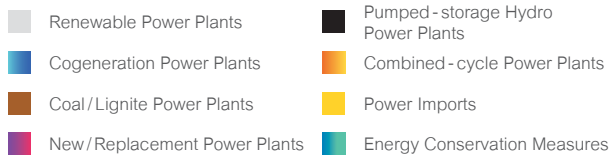
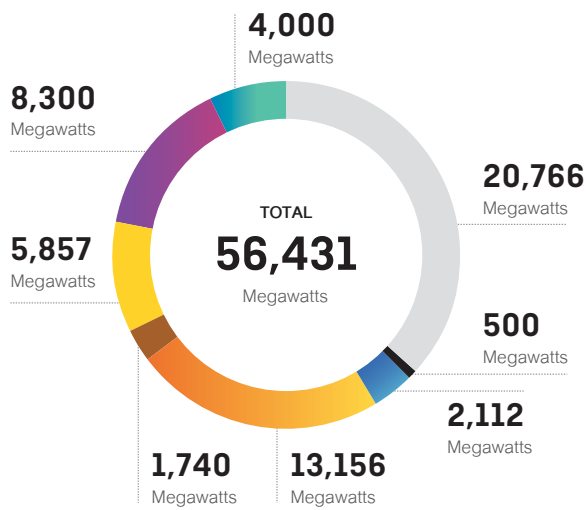
Based on the current forecast, the reliable capacity projected for 2027 will fall below the power demand. The PDP therefore calls for additional power purchases, either from independent power producers (IPPs) or from neighboring countries and from renewable sources. The current PDP2018 demands a total additional reliable capacity of 27,000 megawatts at the end of PDP2018 in 2037 to maintain appropriate power security. In addition to maintaining power security, additional generating capacity is needed to replace decommissioned capacities. This additional capacity combined with additional power from renewable energy and additional capacity from increasing demand during 2018-2037 is projected at 56,431 megawatts.

POWER GENERATING CAPACITY OVERVIEW 2018-2037

Unit : Megawatts



SUMMARY OF ADDITIONAL CAPACITY DURING 2018 - 2037, BY TYPE OF POWER PLANT



Source: Power Development Plan for 2018-2037 (PDP2018), approved by the Cabinet on April 30, 2019

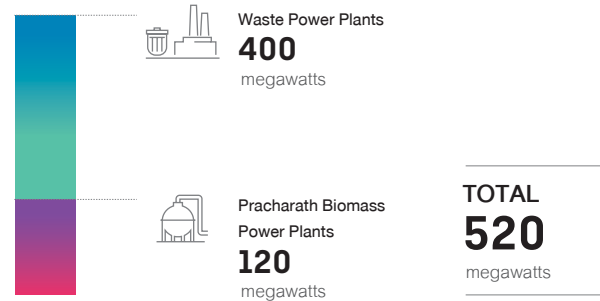
3. Promotion Plan for Power Generation from Renewable Energy

As of August 2019, the government was committed to buying 11,844 megawatts of power generated by renewable and alternative energy sources under the Alternative Energy Development Plan (AEDP2015). The new PDP is likely to call off the purchase of renewable power supply to the national grid from private producers until 2026 but to replace it with power generated from waste in communities, from floating solar PV farms in water reservoirs, and from solar cells and solar rooftops under the new AEDP during 2018 - 2037 scheme defined as follows:

POWER SCHEME WITH TARGET OF 18,696 MEGAWATTS FROM RENEWABLE ENERGY

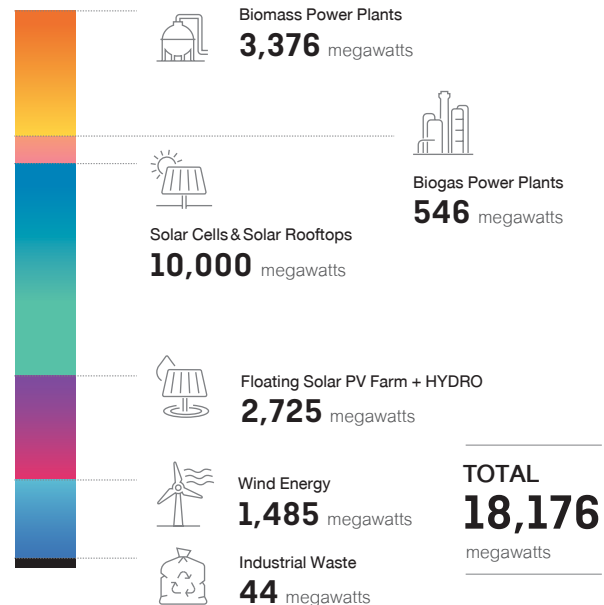
Power Plants under Government Support Policy

New renewable power plant project during 2018 - 2037



Renewable Energy Power Plants under AEDP

New renewable energy power plants under AEDP during 2018 - 2037



Source: Power Development Plan for 2018-2037 (PDP2018), approved by the Cabinet on April 30, 2019

GPSC anticipates the first PDP2018 review by 2020 to coincide with changing circumstances, including an indefinite delay of 100 megawatts of supply from solar rooftop projects in 2019 and a delay from Pracharath Biomass power plants in three southern provinces. In addition, the original definition of power generated from biogas was unclear between sewage / waste and energy plants. The policy to support community power plants was also vaguely defined. However, the new PDP revision is expected to maintain the target of power generated from renewable energy of 18,696 megawatts, but with some adjustment on supply sources to reflect reality of the current situation.

GENERAL INFORMATION

COMPANY NAME: GLOBAL POWER SYNERGY PUBLIC COMPANY LIMITED

SECURITY NAME:	GPSC
ESTABLISHMENT DATE:	January 10, 2013
REGISTERED AS PUBLIC COMPANY LIMITED:	November 27, 2014
FIRST DAY OF TRADE ON SET:	May 18, 2015
COMPANY REGISTRATION NUMBER:	0107557000411
REGISTERED CAPITAL:	THB 28,197,293,710 as of December 31, 2019, comprising 28,197,293,670 paid-up common shares, with a par value of THB 10 per share common share 2,819,729,367 paid-up THB 28,197,293,670
BUSINESS:	GPSC operates as a power, steam, and utilities producer and distributor. In addition, the company invests in other companies that generate and distribute power, steam, and utilities, including related businesses, both domestically and overseas.
TYPE OF BUSINESS:	Energy and Utilities
INDUSTRY GROUP:	Resources
NUMBER OF EMPLOYEES:	345 (as of December 31, 2019)
WEBSITE:	www.gpscgroup.com

CONTACT INFORMATION

INVESTOR RELATIONS

Telephone: +66 (0) 2140 4646,
+66 (0) 2140 5318,
+66 (0) 2140 4691
Fax: +66 (0) 2140 4601
E - mail: ir@gpscgroup.com

CORPORATE AFFAIRS AND

LEGAL DEPARTMENT / COMPANY SECRETARY

Telephone: +66 (0) 2140 4632,
+66 (0) 2140 4719
Fax: +66 (0) 2140 4601
E - mail: company-secretary@gpscgroup.com

HEAD OFFICE AND BRANCHES

HEAD OFFICE:

555/2 Energy Complex Building B, 5th Floor,
Vibhavadi Rangsit Road, Chatuchak Sub - District,
Chatuchak District, Bangkok 10900, Thailand
Telephone: +66 (0) 2140 4600 Fax: +66 (0) 2140 4601

LOCATION OF BRANCH 1:

CENTRAL UTILITY PLANT 1 (CUP-1):

24 Pakorn Songkro Raj Road, Huaypong Sub - District,
Muang Rayong District, Rayong 21150, Thailand
Telephone: +66 (0) 3897 4333 Fax: +66 (0) 3897 4500

LOCATION OF BRANCH 2:

CENTRAL UTILITY PLANT 2 (CUP-2):

92/9 Rayong Highway 3191, Map Ta Phut Sub - District,
Muang Rayong District, Rayong 21150, Thailand
Telephone: +66 (0) 3897 4333 Fax: +66 (0) 3897 4500

LOCATION OF BRANCH 3:

CENTRAL UTILITY PLANT 3 (CUP-3):

5/11 Pakorn Songkro Raj Road, Map Ta Phut Sub - District,
Muang Rayong District, Rayong 21150, Thailand
Telephone: +66 (0) 3897 4333 Fax: +66 (0) 3897 4500

LOCATION OF BRANCH 4:

SRIRACHA POWER PLANT:

42/3, Moo 1, Sukhumvit Road, Tung Sukhla Sub - District,
Sriracha District, Chonburi 20230, Thailand
Telephone: +66 (0) 3840 7407 Fax: +66 (0) 3840 7400

LOCATION OF BRANCH 5:

MAINTENANCE CENTER:

98/19 Rayong Highway 3191, Map Ta Phut Sub - District,
Muang Rayong District, Rayong 21150, Thailand
Telephone: +66 (0) 3897 4560

LOCATION OF BRANCH 6:

RDF PLANT:

94/4 Moo 3, Tambon Namkhok, Muang District,
Rayong 21000

LOCATION OF BRANCH 7:

CENTRAL UTILITY PLANT 4 (CUP-4):

1/2 Moo 2, Tambon Ban Chang, Ban Chang District,
Rayong 21130

REFERENCES

SECURITIES REGISTRAR

Thailand Securities Depository
Company Limited (TSD)
The Stock Exchange of Thailand Building
(Next to the Embassy of the People's
Republic of China)
93 Ratchadaphisek Road, Dindaeng
Sub - district, Dindaeng District,
Bangkok 10400, Thailand
Telephone: +66 (0) 2009 9999
Fax: +66 (0) 2009 9991

AUDIT FIRM

PricewaterhouseCooper ABAS Company Limited
179/74 - 80 Bangkok City Tower, 15th Floor,
South Sathorn Road, Thung Maha Mek Sub - district,
Sathorn District, Bangkok 10120
Telephone: +66 (0) 2844 1000
Fax: +66 (0) 2286 0500

GENERAL INFORMATION OF GPSC INVESTED COMPANIES

As of December 31, 2019

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COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
SUBSIDIARIES						
Combined Heat and Power Producing Company Limited 555/2 Energy Complex, Building B, 5 th Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand Tel: +66 (0) 2143 9644 Fax: +66 (0) 2143 9645	A very small power producer firm (VSPP) operating a combined heat and power with district cooling power plant to generate and supply electricity to EGAT and chilled water to Bangkok Government Complex	THB 500,000,000	Common share	THB 371,730,000	THB 10 / share	100%
Natee Synergy Company Limited 555/2 Energy Complex, Building B, 5 th Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand • Indirect Associate	Invest in Businesses related to power generation	THB 6,826,500,000	Common share	THB 6,826,500,000	THB 100 / share	100%
Xayaburi Power Company Limited 215 Lanexang Avenue, Ban Siang Yuen, Chantaburi District, Vientiane, Lao PDR Tel: +856 (21) 251718 Fax: +856 (21) 215500	A hydropower producer generating and supplying power to EGAT and ELECTRICITE DU LAOS (EDL)	THB 26,861,000,000	Common share	THB 26,861,000,000	THB 10 / share	25% (Through Natee Synergy)
Ichioseki Solar Power 1 GK Company 5F, Hanai Building, 1-2-9 Shibakoen Minato-ku, Tokyo 105-0011 Tel: +81 (3) 5362 7035 Fax: +81 (3) 5362 7036	A solar power producer, generating and supplying solar electricity to a Japanese utility company	Yen 10,000	Common share	Yen 10,000	-	99%

COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
IRPC Clean Power Company Limited 299 Moo 5, Sukhumvit Rd., Choeng Noen Sub - district, Muang District, Rayong, 21000, Thailand Tel: +66 (0) 3861 1333, +66 (0) 3861 3571 - 80 Fax: +66 (0) 3861 2812 - 3	A small power producer (SPP) operating a cogeneration plant to generate and supply electricity to EGAT and the surplus and steam to industry customers in IRPC Industrial zone	THB 3,362,300,000	Common share	THB 3,083,000,000	THB 10 / share	51%
GPSC International Holdings Limited Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong Tel: + (852) 2980 1888 Fax: + (852) 2956 2192	Support to future overseas investment and expansion	USD 100,000	Common share	USD 98,000	-	100%
Global Renewable Power Company Limited 555/2 Energy Complex, Building B, 5 th Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand Tel: +66 (0) 2143 9644 Fax: +66 (0) 2143 9645	To accommodate future renewable energy investment	THB 1,000,000	Common share	THB 1,000,000	THB 100 / share	100%
GPSC Holding (Thailand) Company Limited (formerly ENGIE Holding (Thailand) Co., Ltd.) 555/2 Energy Complex, Building B, 5 th Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand Tel: +66 (0) 2140 4600	Investment through shareholding in power generation - related businesses of Glow Energy Public Company Limited	THB 7,804,100,000	Common share	THB 7,804,100,000	THB 10 / share	100%

COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
Glow Energy Public Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Generation and supply of electricity, steam and water to users in the industrial sector, and distribution to electricity to EGAT	THB 14,828,650,350	Common share	THB 14,628,650,350	THB 10 / share	45.67% common major shareholder 54.16% (through GPSC Holding)
Energy Recovery Unit Company Limited 555/2 Energy Comple, Building B, 5 th Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand Tel: +66 (0) 2140 4600	Generation and supply of power and stream to processes of Thaioil's Clean Fuel Project (CFP) using oil residue, byproducts from CFP refining processes, as the main fuel	THB 477,000,000	Common share	THB 477,000,000	THB 10 / share	100%

INDIRECT SUBSIDIARIES

Glow Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Provision of management services, consultant services and management advisory for related companies	THB 4,964,924,770	Common share	THB 4,401,668,111	THB 10 / share	100%
Glow IPP Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9 Plant Location 42 Moo 8, CIE-8 Rd., WHA Chonburi Industrial Estate 1, Sriracha District, Chonburi 20230 Tel: +66 (0) 3834 5900-5 Fax: +66 (0) 3834 5906	Generation and supply of electricity to EGAT	THB 2,850,000,000	Common share	THB 2,850,000,000	THB 10 / share	95% (through Glow)

COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
Glow SPP 2 Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9 Plant Location 11, I-5 Rd., Map Ta Phut Industrial Estate, Map Ta Phut, Muang District, Rayong 21150 Tel: +66 (0) 3869 8400-10 Fax: +66 (0) 3868 4789	Generation and supply of electricity and steam for industrial use	THB 4,941,534,880	Common share	THB 4,941,534,880	THB 10 / share	100%
Glow SPP 3 Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9 Plant Location 11, I-5 Rd., Map Ta Phut Industrial Estate, Map Ta Phut, Muang District, Rayong 21150 Tel: +66 (0) 3869 8400-10 Fax: +66 (0) 3868 4789	Generation and supply of electricity, steam and water for industrial use	THB 7,373,389,550	Common share	THB 7,373,389,550	THB 10 / share	100%
Glow IPP 2 Holding Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Investment in other companies	THB 7,565,000,000	Common share	THB 7,565,000,000	THB 100 / share	100%

COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
GHECO - One Company Limited 11, I-5 Rd., Map Ta Phut Industrial Estate, Map Ta Phut, Muang District, Rayong 21150 Tel: +66 (0) 3869 8400-10 Fax: +66 (0) 3868 4789	Generation and supply of electricity to EGAT	THB 11,624,000,000	Common share	THB 11,624,000,000	THB 10 / share	65% (through Glow IPP 2 Holding)
Glow IPP 3 Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Development of power generation projects	THB 380,000,000	Common share	THB 245,000,000	THB 10 / share	100% (through Glow IPP 2 Holding)
Glow SPP 11 Company Limited 60/19 Moo 3, Siam Eastern Industrial Park, Mabyangporn, Pluak Daeng, Rayong 21140 Tel: +66 (0) 3889 1324-8 Fax: +66 (0) 3889 1330 Plant Location 60/19 Moo 3, Siam Eastern Industrial Park, Mabyangporn, Pluak Daeng, Rayong 21140 Tel: +66 (0) 3889 1324-8 Fax: +66 (0) 3889 1330	Generation and supply of electricity and water for industrial use, and supply of electricity to EGAT	THB 1,520,000,000	Common share	THB 1,520,000,000	THB 10 / share	100%
Houay Ho Thai Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Investment (shareholding) in other companies	THB 422,152,000	Common share	THB 422,152,000	THB 8 / share	49% (through Glow)

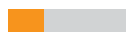
COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
Houay Ho Power Company Limited (Established in Laos) Vieng Vang Tower (Unit 15), 5 th Floor, No. 502A, Boulichan Rd., Dongpalan Thong Village, Sittasanak District, Vientiane Capital, Lao PDR Plant Location P.O. Box 661 Pakse, Lao PDR Tel: (856) 36 211720 - 1 Fax: (856) 36 211719	Generation and supply of electricity to EGAT and Electricite du Laos (EDL)	USD 40,000,000	Common share	USD 40,000,000	USD 80 / share	67.25% (through Glow and Houay Ho Thai)
Glow Energy Myanmar Company Limited (Established in Myanmar) Room number 6004 Pyay Garden Office Tower, 346/354 Pyay Rd., Sanchaung Township, Yangon	Provision of technical and consultancy services for the power sector	USD 650,000	Common share	USD 650,000	USD 1 / share	100% (through Glow)

JOINT VENTURES

Thai Solar Renewable Company Limited 725 Metropolis Building, 19 th Floor, Sukhumvit Rd., Klongton Nua, Wattana, Bangkok 10110 Tel: +66 (0) 2258 4530 Fax: +66 (0) 2258 4534	Invest in Power generation related businesses	THB 583,333,400	Common share	THB 583,333,400	THB 10 / share	40%
• <u>Indirect Joint Ventures</u>						
Siam Solar Energy 1 Company Limited 725 Metropolis Building, 19 th Floor, Sukhumvit Rd., Klongton Nua, Wattana, Bangkok 10110 Tel: +66 (0) 2258 4530 Fax: +66 (0) 2258 4534	A very small power producer generating solar electricity	THB 1,800,000,000	Common share	THB 1,800,000,000	THB 100 / share	40% (through Thai Solar Renewable)

COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
Nam Lik 1 Power Company Limited 402B of 4 th Floor, Vieng Vang Tower, Unit 15 Boulichan Rd., DongpalanThong Village, Sisattanak District, P.O. Box 3684, Vientiane Capital, Lao PDR	A run-of river hydroelectric company, generating and supplying electricity to ELECTRICITE DU LAOS (EDL)	USD 37,200,000	Common share	USD 37,200,000	USD 10 / share	40%
Nava Nakorn Electricity Generating Company Limited 111 Moo 20 Phahonyothin Rd., Khlomg 1, Khlomg Luang District, Pathum Thani 12120 Tel: +66 (0) 2978 5283, +66 (0) 2978 5291	A very small power producer operating a cogeneration plant to generate and supply electricity to EGAT and the surplus and steam to industry users in Nava Nakorn Industrial Promotion Zone	THB 1,550,000,000	Common share	THB 1,550,000,000	THB 10 / share	30%
ASSOCIATE						
Bangpa-In Cogeneration Company Limited 587 Viriyathavorn Building, Sutthisan Rd., Din Daeng, Bangkok, Thailand 10400 Tel: +66 (0) 2691 9720 Fax: +66 (0) 2691 9723	A small power producer operating a cogeneration plant to generate and supply electricity to EGAT and the surplus electricity and steam to industrial users in Bang Pa-In Industrial Estate	THB 2,705,000,000	Common share	THB 2,705,000,000	THB 10 / share	25%
Eastern Seaboard Clean Energy Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Investment (shareholding) in other companies	THB 1,039,000,000	Common share	THB 1,017,403,020	THB 10 / share	33% (through Glow IPP 3)

COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
Glow Hemaraj Wind Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Development of wind power generation projects	THB 50,000,000	Common share	THB 12,500,000	THB 10 / share	100% (through Eastern Seaboard Clean Energy)
Rayong Clean Energy Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Development of waste-to-energy projects	THB 50,000,000	Common share	THB 12,500,000	THB 10 / share	100% (through Eastern Seaboard Clean Energy)
Chonburi Clean Energy Company Limited 1 Empire Tower, 38 th Floor - Park Wing, South Sathorn Rd., Yannawa, Sathorn, Bangkok 10120 Tel: +66 (0) 2670 1500-33 Fax: +66 (0) 2670 1548-9	Development of waste-to-energy projects	THB 989,000,000	Common share	THB 989,000,000	THB 10 / share	100% (through Eastern Seaboard Clean Energy)
LONG - TERM INVESTMENT						
Business Services Alliance Company Limited 555 PTT Office, Phra Khanong Oil Depot, Art - Narong Road, Khlong Toei, Bangkok, 10260, Thailand Tel: +66 (0) 2239 7328 Fax: +66 (0) 2239 7326	Manage human resources outsourcing for PTT Group	THB 2,000,000	Preferred share	THB 2,000,000	THB 10 / share	25%
• <u>Indirect Long - term Investment</u>						
Sport Services Alliance Company Limited 199/7 Moo 1, Tambon Choeng Noen, Muang District, Rayong 21000, Thailand Tel: +66 (0) 3894 8138 Fax: +66 (0) 3894 8139	Manage football club for PTT Group	THB 5,000,000	Common share	THB 5,000,000	THB 10 / share	25% (through Business Services Alliance)



COMPANY	TYPE OF BUSINESS	REGISTERED CAPITAL	TYPE OF SHARE	PAID-UP CAPITAL	SHARE VALUE	GPSC'S SHAREHOLDING
24M Technologies, Inc. 130 Brookline St, Cambridge, MA 02139, U.S.A. Tel: (001) 617 553 1012	Carry out research and development of batteries for energy storage in the industrial sector and for enhancement of power distribution and power network security	USD 97,163.47	Preferred share	USD 87,142,045	USD 0.001/share	32.7%
Ratchaburi Power Company Limited 1828 Sukhumvit Road, Bangchak Sub-district, Phra Khanong District, Bangkok 10260, Thailand Tel: +66 (0) 2311 5111-9 Fax: +66 (0) 2332 3882	Generate and supply power from combined-cycle power plant	THB 7,325,000,000	Common share	THB 7,325,000,000	THB 10/share	15%
Sarn Palung Social Enterprise Company Limited 555/1 Energy Complex, Building A, 10 th Floor, Vibhavadi Rangsit Rd., Chatuchak, Bangkok 10900, Thailand	Produce and sell goods and service for the benefit of society, communities, and the environment	THB 10,000,000	Common share	THB 10,000,000	THB 10/share	10%



RISK FACTORS



In view of current economic, commercial, social, and environmental shifts that affect business stability and sustainability, efficient responses are what Global Power Synergy Plc. (GPSC) focuses on, given that these dynamic and dramatic shifts are caused by internal and external factors. GPSC believes in a business philosophy that aims for shared values among all stakeholders, be it in economic, community, social, and environmental aspects. As always, obstacles breed opportunities. Through systematic business management, problems and obstacles posed by these changes are considered manageable.

Risk management is therefore a mechanism that GPSC values and uses to manage changes and their ensuing problems and obstacles affecting business and organizational goals. GPSC, in line with international practices, supports development and implementation of risk management at all levels so that the entire organization may be able to efficiently deal with any risk emerging from internal and external factors.

Under the risk management framework, GPSC institutes regular assessment, analysis, and review of risk management at both corporate and operating levels during normal operation. It also extends risk management to projects being developed - ranging from initial investigation, development, and construction stages to commercial operation. This ensures that all aspects of operations align with GPSC's strategies and business plans, both short and long terms. Risk oversight at all levels are equally important; GPSC arranges for close monitoring and reporting of risk management results to top management, the Risk Management Committee, and the Board. All of these ensure that GPSC's overall drive aligns with plans supported by efficient risk management.

The key risks facing GPSC over 2019 were as follows:

1. INTERNAL RISK FACTORS

1.1 HUMAN RESOURCE CAPABILITY RISK

With a focus on leveraging existing assets alongside its strategic ambition to expand the business both domestically and internationally for long-term sustainable growth, management of personnel and organizational competence has posed challenges to driving GPSC along the desired direction. In 2019 GPSC merged with Glow Energy Public Co., Ltd. (GLOW), a sizeable energy company with businesses in Thailand and overseas with capable personnel in various fields. The business merger, in addition to quality consolidation, entailed a merger of experts, thus turning the challenge of personnel management into the integration of human resources in favor of driving the business toward planned growth.

GPSC stresses communication to create understanding and bolster morale among staff. It is well-prepared for the management of human resources (HR), work structures, and work processes thanks to systematic procedures for staff recruitment, retention and development established from workforce development and HR management plans designed for GPSC and subsidiaries. This complies with GPSC's long-term HR management strategy, devised to ensure that its human resources can drive the operation with maximum efficiency under its business plans. It values the Leadership Development Program to groom future leaders for business growth and ensure that successors are readily equipped for carrying on its missions. For individuals, it has Individual Development Plans and Competency Development Plans, under which continuous training is provided.

1.2 POWER PLANT RELIABILITY RISK

To continually deliver quality power to industrial customers and EGAT, which demand highly stable power supply, risk management for power plants is GPSC's prime concern as to prevent impacts on customers.

Part of the risk management during 2019 for supply stability and win customers' confidence was the management of supply adequacy and preparedness of production and transmission systems. GPSC's electricity and steam production and distribution network were integrated with those of GLOW. Added value can be realized from joint management of operating efficiency and capacities.

Over the recent years, GPSC has applied quality management standards to improve power plant efficiency, including ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and TIS 18001:2554 under Integrated Management System (IOMS R-100 Rev.3) in addition to Total Productive Maintenance (TPM) and Operational Excellence Management System (OEMS) at all sites. The moves earned GPSC a TPM Excellence Award, attested by the Japan Institute of Plant Maintenance (JIPM), a credible industrial institute of Japan; this award is traditionally presented to entities that succeed in process efficiency improvement, lowering production costs, and sharing of benefit with communities, society and the environment.

Besides developing and upgrading power plant efficiency, GPSC recognizes that sound customer relationship management leads to satisfaction and lasting relations between customers and the Company, notably in enhancing the probability of renewing long-term contracts with customers nearing expiry and cooperation with customers for higher energy efficiency. The outcomes echo customers' satisfaction through a survey in various aspects, including product quality and goods dispatch, personnel quality and customers' memorable experiences, among others. In 2019, broadly speaking, customers were satisfied with the operation of Sriracha and Rayong Power Plants, with a 'good' satisfaction score (86.3%).

1.3 SAFETY, SECURITY, HEALTH, AND ENVIRONMENT RISK

To control risks on safety, security, health, and environment that could lead to losses of lives, injuries, and illnesses related to work by employees and contractors, which in turn lead of possible work disruptions and potential impacts on communities, society, and the environment, GPSC is committed to comply with the scope of its Quality, Safety, Security, Health, and Environmental Policy. The focus is on cultivating the corporate culture on safety ("we SAFE") to forge a safety attitude for everyone to work safely, pay attention to everyone, think before acting, and stop if unsafe. The following moves exemplified GPSC's safety enhancement for employee and contractors:

- Setting and announcing a Quality, Security, Safety, Health, and Environmental Policy
- Appointing a Safety, Occupational Health and Environment Committee
- Contractor safety management
- Health risk assessment
- Management of industrial hygiene and the Fit to Work program
- A credible system to collect data on performance outcomes of health and safety, attested by a third-party agency
- Safety Manual for employees and contractors
- Promotion of the "we SAFE" corporate culture with measurable scores through the assessment of the security, safety, health, and environmental culture
- Management of process safety and personal safety
- Short-term and long-term strategic goals for health and safety operation
- Establishment of a suggestion program for sub-standards reports and incident report and investigation program
- Health and safety management under ISO 45001:2018 and TIS 18001:2554
- Management of work environment

GPSC has also managed its operating safety through Operational Excellence Management System (OEMS) and International Organization for Standardization (ISO) with earnest and robust compliance with the law, resulting in its winning a TIS 18001 certificate, presented by MASCI since 2014. The system has undergone relentless improvement, taking into account risks, opportunities, and legal requirements for health and safety management. Finally, it has successfully upgraded the international-standard certification for health and safety management to ISO 45001:2018 and Integrated Management System (IMS R-100 Rev.3).

Thanks to these relentlessly robust moves, GPSC has achieved its goal of being a corporation free of lost-workday cases since 2013 (as of December 31, 2019) and with 9,440,929 man-hours (staff and contractors) of accumulated work without lost workdays. The goal is 10 million man-hours.

1.4 PROJECT CONSTRUCTION RISK

GPSC takes very seriously the need to closely oversee projects under construction to keep them within the budget and timeframe while ensuring supply stability of electricity and water for customers. The attempt is also to keep returns on investment comparable with estimates. The projects completed as planned during 2019 are:

- (1) CUP Rayong 4 – a cogeneration power plant fueled by natural gas located in GC Estate of Asia Industrial Estate, under the management of GPSC. CUP Rayong 4 is meant for increasing GPSC's stability and security of other plants and for meeting customers' energy demand.
- (2) XPCL – a run-of-river hydropower plant project under the management of Xayaburi Power Co., Ltd. (XPCL), located in Lao PDR. The plant produces and transmits electricity to Thailand to increase Thailand's energy stability and security.
- (3) NL1PC – a run-of-river hydropower plant project under the management of Nam Lik 1 Power Co., Ltd. (NL1PC), located in Lao PDR. The plant produces and transmits electricity to Laos.

Two projects are under construction:

- (1) RDF (refuse - derived fuel) Power Plant – a subproject of the integrated waste management project in Rayong under the management of GPSC. The project addresses the public policy that encourages power production from waste – an attempt to reduce it. It also helps solve waste problems in Rayong, considered a social benefit.
- (2) Energy Recovery Unit (ERU) – a thermal power plant fueled by residue from the refining process in Thailoil's Clean Fuel Project (CFP), located on Thailoil's premises in Chon Buri. The project will produce electricity and steam for various refining units under CFP.

As a rule, these risks deal with projects not executed according to plans, with delays coming from the construction and installation of machinery by project contractors, cost overruns, technical engineering problems, or environmental problems that affect stakeholders and communities. GPSC critically values project execution during construction by selecting trustworthy and skillful contractors. It carefully engages them with turnkey contracts, while having regular direct and indirect communication with nearby communities and stakeholders to win their positive attitudes toward the projects. GPSC also arranged for advisors on technical and project management aspects who are tasked with the control and inspection of work progress to ensure that construction is complete within the budget and timeframe.

1.5 FUEL SUPPLY RISK

Fuel dictates the stability and costs of the power business. GPSC's power and steam production capacity has long depended on natural gas as a prime fuel. To manage the risk posed by one single type of fuel, GPSC entered into an agreement on long - term gas supply and consumption with PTT, with conditions laid out for quality, quantity, and price. Since PTT is Thailand's major gas supplier, GPSC's sites that require natural gas are located close to PTT's main gas terminal and gas transmission line. The approach has kept supply risk low.

In parallel, GPSC has laid down a strategy on diversified growth of the power business by joining in projects that invest in or develop power plants that run on alternative fuels or other types of fuel, both in and outside Thailand. This move reduces reliance on natural gas. In view of the merger with GLOW, the pursuit of such growth strategy proved to reduce dependence on natural gas to only 68% of the total capacity, domestically and internationally. Consumption of more diversified fuels, including coal, hydro power, and solar power, has subsequently increased. In doing so, GPSC successfully reduced risk from reliance on a single fuel while being able to follow the investment strategy, which stresses investment diversification to achieve a stable income in the long term.

1.6 CUSTOMER CONCENTRATION RISK

As GPSC's business and power production units are located in various industrial estates, in Map Ta Phut and Rayong areas in particular, GPSC's income is mainly derived from industrial customers. Should requirements change for operating in industrial estates, or should accidents, natural disasters, failures, or disruptions of industrial estate utility systems happen, its customers may be affected. Consequently, customers' shutdowns or slashed production could cause difficulty to GPSC's production management. For instance, when several shutdowns happen over the same period, electricity demand at a given time may drop, thus hurting GPSC's production and revenue.

A production management plan that responds to customers' demand for power and utility, and a plan that best responds to the peak demand at any given time, are of importance to GPSC.

Following the merger with GLOW, whose customers are found in the same areas as those of GPSC, an opportunity has arisen from the integration of production and distribution, resulting in more efficient use of fuels, reduced losses in the distribution system, and increased stability of product delivery. GPSC consequently benefited from the lower production cost, while the risk from concentration of income was better managed. Currently, GPSC's revenue from power production under IPP contracts with EGAT accounts for as much as 50% of the total capacity, or about 2,400 MW.

1.7 RISK FROM FINANCIAL STRUCTURE AND FUNDING FOR INVESTMENT EXPANSION

A business milestone and major financial transaction for 2019 was the purchase of GLOW and the ensuing share transfer. This has resulted in GPSC's direct and indirect shareholding in GLOW to rise from 69.11% to 99.83% of the paid - up capital.

As a result of the share purchase of THB 134.5 billion, GPSC managed risks from its acquisition of short - term loans (up to a one - year period) from financial institutions and major shareholders and risks of limitation of funding for investment expansion by:

- (1) Capital increase by around THB 74 billion, completed on October 9, 2019. The acquired funding went to short - term loan repayment to ease its debt burden.
- (2) Issuance of debentures or or acquisition of long - term loans to compensate for the unpaid portion of short - term loans, or both.

GPSC's overall financial policy keeps its funding structure comparable to those of other leading companies of the same business. To elaborate, its net debt - to - equity ratio must not exceed one, and its net debt - to - EBITDA ratio must not exceed four.



2. EXTERNAL RISK FACTORS

With the current domestic circumstances featuring more intense competition in the energy industry, coupled with significant transformation of production and energy consumption technology, GPSC recognizes and braces for impacts on its current and future businesses. It also seeks opportunities for growing domestic investment due to such shifts as well as those for overseas investment to drive its operations for success under its growth strategies. This year, key external risk factors posing threats to goal achievement were as follows:

2.1 INVESTMENT AND BUSINESS EXPANSION RISK

To fulfill its mission of becoming a leading power producer that contributes to national energy security under a business strategy designed to attain sustainable growth, pursuit of investment opportunities through cooperation with PTT Group, mergers and acquisitions, and New S-Curve investment is GPSC's approach.

GPSC values competence development through the use of knowledgeable personnel with diverse experience. This is coupled with its efficient investment management, starting from project selection to ensure alignment with its strategic direction to facilitate risk management to carefully expand investment in assorted aspects, whether financial returns, strategic compatibility, operating efficiency, business allies, or others. In advance, the Company has identified measures for investment risk prevention and paid particular attention to the selection of joint-venture partners and business allies, basing its consideration on their reputation, knowhow, experience, financial security and financial status, and track records. One can therefore be sure of attractive benefit for joint, long-term business collaboration.

Note that investment in energy and battery storage systems represents a brand-new business under joint development with 24M Technologies, Inc. (24M), a strategic business undertaking under disruptive technology, currently developing a pilot battery plant to produce energy and battery storage systems on a commercial scale. GPSC has closely monitored its operations through high-ranking executives to minimize risks that could delay the commercial operation of the pilot plant or cause it to fail.

2.2 CLIMATE CHANGE RISK

GPSC's business relies on production factors vulnerable to climate change, either directly or indirectly. Since water is a major production factor for industrial customers and GPSC's own power plants, changes in water levels at a given dam may affect production and income from hydro power plants. Heavy rains that may cause damage to the dam itself and consequently to nearby communities could cause the operation to cease, and even worse, may wreck lives and properties of people residing in the vicinity. Besides, climate change may affect sunlight intensity. Periods for power generation may be shortened, thus shrinking revenue derived from solar power plants.

GPSC therefore closely monitors development in climate change, natural disasters, and rainfall on a regular basis to brace for possible effects on project operation. Evacuation and emergency response plans were drawn up, with exercises arranged and with communication to neighboring communities and government agencies in various countries where GPSC invests. This move is designed to ensure immediate response efficiency.

Climate change, however, is recognized as a cause of consumers' behavior change, which in turn results in higher demand for utility in the industrial and civil sectors. This opens up an opportunity for GPSC to expand investment to satisfy customers' demand, considering its capability of selling electricity, steam, industrial water and chilled water. GPSC, in parallel, already has in place plans to invest in various types of power plants and in expanding to more countries in the region. This approach partly reduces risk from climate change.

2.3 VOLATILITY OF NATURAL GAS PRICE RISK

For IPPs and SPPs fueled by natural gas and coal, the fuel cost can be passed on to customers under PPAs with EGAT. However, this is not so for power generation and steam production for industrial customers. Even though the gas price—which changes every month—can be passed on to customers, Ft (the automatic sales price factor for GPSC) is adjusted by the Energy Regulatory Commission (ERC). Should the power tariffs of a given period not align with each month's gas price movement, GPSC's profit would fall, particular when the gas price suddenly takes off.

This year the average gas price proved higher; yet, the power prices were somewhat cushioned for the sellers, so GPSC was mildly affected by impacts of gas price volatility.

2.4 CHANGES IN LAWS AND REGULATIONS RISK

The public sector's emerging amendment of laws, regulations, and policies related to businesses could affect GPSC's competitiveness and investment schemes either positively or negatively, for instance, PDP 2019 (Thailand Power Development Plan), the policy to add capacities from renewable energy. To mitigate such impacts, GPSC has closely monitored policy changes to keep pace with the environment and enable itself to cope with changes. This will allow GPSC to find suitable strategies to handle with such circumstance, including pursuit of opportunities for additional investment in new projects in return for benefits to be granted by the public sector.

In addition, GPSC has set up a central unit responsible for preparing databases on legislation, tracking emerging legal provisions and regulations, and constantly verifying GPSC's compliance with the laws, regulations, and requirements of various agencies. It also fosters corporate values to all employee so that they can perform their duties in accordance with the corporate governance code and company's code of conduct. This is to ensure GPSC's intention to be an operator with responsibility for community, society, environment, and stakeholders in all sectors.

2.5 INTEREST RATE VOLATILITY

GPSC acquires long-term funding through the issuance of debentures carrying fixed interest rates, as well as loans from financial institutions carrying floating interest rates. Despite relatively low fluctuation in loan interest rates, GPSC maintains a proper balance between debts with fixed interest rates and those with floating rates, bearing in mind the nature of the business.

2.6 VOLATILITY OF FOREIGN - CURRENCY EXCHANGE RATE (FX) RISK

GPSC's current main revenue is from its domestic sale of power and is in the baht currency. Although the pricing formulas for IPPs under PPAs with EGAT contain reference to the US dollar, the amount is roughly equal to its operating expenses, also in US dollars. This natural hedge provides GPSC with a minimum impact of US dollar fluctuation.

As for its investment and returns on investment from overseas projects, which are in other currencies, GPSC has adopted a plan to minimize the impacts of foreign exchange (FX). It therefore closely monitors FX movements, carefully manages financial options, and applies additional hedging instruments to lower FX volatility risks.



INTERNAL CONTROL AND RISK MANAGEMENT



Global Power Synergy Limited (GPSC) values risk management in advancing business for stability, sustainability and best interests for all stakeholders from current and future business expansion. Risk management is a crucial tool that enables effective response to the changing business environment and maintains business competitiveness as planned.

GPSC has implemented risk management efficiently throughout the corporation by defining risk management into:

1. RISK MANAGEMENT – CORPORATE LEVEL

For risks potentially impacting or compromising fulfillment of corporate objectives, enterprise risk management is accomplished, consistent with business conditions and business plans by monitoring and reporting risk management results to the Board of Directors to ensure that the operations of the Company have been driven in the defined direction.

2. RISK MANAGEMENT – FUNCTIONAL LEVEL

These risks could impact or compromise unit operations, resulting in missing objectives under respective responsibilities. The risks at every unit of the risk level will be managed and controlled at an acceptable level by the responsible unit. It will be implemented, monitored and evaluated by the management to ensure that every sector of the corporation takes into account operational achievement as well as managing various risks that may cause extensive impacts on business operations.

GPSC recognizes the criticality of internal control and risk management in accordance with the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework in order to achieve the objectives of internal control in three areas, namely Effectiveness and Efficiency of Operations, Reliability of Financial Reporting and Compliance with Laws and Regulations.

The Board's Opinion towards GPSC's Internal Control System

The Board assigned the Audit Committee to assess and ensure that the Company has established an internal audit system, an internal control system and a risk management system in accordance with appropriate and effective internal control framework. Its task is to review the adequacy assessment of the internal control system and presented findings to the Board.

In 2019, the Audit Committee conducted a review to assess the Company's internal controls at Meeting No. 7 / 2019 dated December 11, 2019. The committee reviewed the reports submitted by the Compliance Division under the Company Secretary and Corporate Governance and Affairs Department, responsible for assessing the adequacy of the internal control system. With cooperation from the management and related departments and the opinion of GPSC's internal control unit on the assessment results, it is the Audit Committee's opinion that the Company's internal control system is sufficient and fulfills all components of internal control, namely Control Environment, Risk Assessment, Control Activities, Information & Communication and Monitoring Activities.

The Company's management of the internal control system can be summarized within all five control components as follows:



1. CONTROL ENVIRONMENT

The Board and management adhere to and promote integrity and ethics, which are part of the corporate culture, in conducting business, including supervising the operations of GPSC to follow its vision and mission and impose a good internal control environment by defining the organization structure, appropriate reporting lines

- 1.1 The Board and the management established integrity and ethics as one of the values of the Company. GPSC has formally set forth its corporate governance policy, code of conduct, as well as other related policies in a definitive manual for daily duties, stakeholder engagement, management of conflicts of interest and anti-corruption efforts. The policies require all personnel to follow and clearly define sanctions and penalties for non-compliance. Communication to all personnel to understand policies and acknowledge them in writing is undertaken every year, including the orientation for new employees. In addition, GPSC has also prescribed the monitoring of code of conduct compliance and implemented the whistleblowing and complaint-handling policy to put in place a process through which cases of non-compliance are monitored and rectified and disciplinary actions are taken in a timely manner. Additional channels for complaint filing will be made public in 2020. Furthermore, GPSC has planned to apply to be recertified by Thailand's Private Sector Collective Action Coalition against Corruption (CAC) for its anti-corruption efforts, upon the expiration of the certification obtained in 2018.
- 1.2 The Board is independent from the management and is tasked with the oversight and development of internal control. In 2019, the "Skill Matrix" was revised to ensure that the board comprises directors with a diverse range of qualifications necessary for the achievement of the Company's main objectives and goals. GPSC has also specified the scope of authority and responsibilities of its independent directors in the charters of the Board of Directors and the sub-committees so as to remain in line with the criteria stipulated by SEC.
- 1.3 The Board supervises the management and prescribes that it reviews the organizational structure on an annual basis to ensure its alignment with the business direction, corporate strategies, and internal work processes. To this end, the units are divided into three groups, known as three lines of defense. The first line of defense is the unit that owns the process. The second line of defense is the legal and regulatory unit, organizations and corporate risk management units, which are responsible for supervising the operation of each process owner's unit laws, regulations and good internal controls. The third line of defense is the Internal Audit unit, an independent unit that conducts audit of the first and the second lines of defense. Internal Audit is to report the audit findings directly to the Audit Committee and report the managerial aspect to the President and CEO. Together, the three lines of defense create a system of checks and balances. Furthermore, GPSC has also specified the reporting line of each position in the job description as well as defined the approval authority for different operations and business transactions in writing in accordance with the Table of Authority, which is reviewed regularly to ensure its appropriateness.
- 1.4 GPSC has formulated HR management policies and strategies in line with its business strategies and goals and put in place HR management systems and processes that are comparable to those of other leading businesses. The HR management policies provide fair compensation, career advancement, and other incentives and benefits in relation to each employee's quality, achievement, and potential, which are assessed annually. In addition, GPSC has also introduced the Build, Buy, and Borrow strategy to ensure that it can avert a shortage of knowledgeable and capable personnel in a timely manner. Furthermore, as part of the succession plan, GPSC has initiated GPSC Leadership Development Program to develop key talents in the management for future executive roles to replace retiring executives and/or accommodate the Company's future business expansion.
- 1.5 GPSC has issued communications and introduced a policy requiring all employees to study, understand, and comply with the internal control system and the internal audit system, which are regularly reviewed through the Company's internal control policy.

2. RISK ASSESSMENT

The Board and management value risk management for the entire organization. Therefore, the Risk Management Committee (RMC) was established to devise and review risk management policies and scopes, supervise and support risk management and internal control, institute the risk management system and processes to ease impacts of risks on business, including monitoring and assessment of the risk management framework throughout the Company to ensure that GPSC commands risk management, adequate and appropriate internal control under the strategies and business goals of the corporation with the following management guidelines:

- 2.1 As part of risk management, GPSC has appointed the Risk Management Committee (RMC), which follows criteria and practices that are consistent with international risk management principles in accordance with corporate governance guidelines. The committee is responsible for formulating and reviewing corporate risk management policies and framework as well as playing a supportive role in ensuring that operations related to risk management are in line with the Company's business strategies and goals. The committee is also tasked with defining the appropriate and adequate risk appetite for the period in all areas in accordance with business strategies and guidelines to form a framework for risk management. In addition, the Risk Management and Internal Control (RMCC) has been appointed, consisting of the Company's top executives and responsible for reviewing and refining corporate and functional risk management plans and reporting the risk management performance to the Risk Management Committee. Furthermore, GPSC has also established corporate risk management units and assigned to them to coordinate with different units as well as encouraged them to use risk management as a tool to support the Company in achieving its goals. These corporate risk management units are also responsible for monitoring and analyzing the overall corporate risk management and reporting it to the Risk Management Committee and the Risk Management and Internal Control Committee.
- 2.2 GPSC operates in accordance with the COSO ERM Framework and ISO 31000:2009, which focus on tangible corporate risk management and take into consideration the nature and direction of the Company's business operations, goals, performance indicators, as well as internal and external environments that affect business operations, which are analyzed to identify scenarios where the organization may fail to achieve both corporate and functional goals.

In 2019, every unit exhaustively identified its operational risks as well as presented preventive measures and designated responsible persons. These units also consistently reported the progress of their plans to ensure that the operational risk factors of every unit and the potential impact on the entire organization were taken into consideration in establishing risk management approaches that encompassed all dimensions, including investment strategies, operation, regulatory compliance, and information technology.

- 2.3 GPSC assesses both corruption risks and functional risks of every unit, with the corporate risk management units compiling the results and submitting overall risk management reports to the Risk Management and Internal Control Committee.

The Audit Committee has attached great significance to corruption prevention and anti-corruption efforts. To this end, it has conducted reviews to ensure that the Company's internal audit, internal control, and risk management systems under the internal control framework are appropriate and efficient; provided recommendations to the management on how to improve the work processes or systems to reduce various risks, including corruption risks; and encouraged the Company to put in place measures for preventing and combating corruption. In addition, the Internal Audit has also included corruption risks in its annual audit plans.

- 2.4 GPSC has created GPSC Corporate Risk Profile by considering various internal and external factors which may affect business operations and developed mitigation plans to manage those risks appropriately and sufficiently. In addition to GPSC Corporate Risk Profile, the management team has also focused on analyzing and identifying a potential shift in the Company's business model and the nature of its business, and formulated the Management of Change policy, which will facilitate the systematic management of both temporary and permanent changes.

3. CONTROL ACTIVITIES

GPSC has efficient and effective control activities that reduce the risks preventing the Company from achieving its objectives by conducting risk assessment at the organization level, identifying risks, analyzing them, and determining control measures to reduce risk levels as follows:

- 3.1 GPSC has prescribed corporate internal controls and other key subprocesses in line with its business operations, risk appetite, and control environment. Approved by the manager of the affiliated unit, all internal controls are communicated to relevant employees and implemented to mitigate risks to a level as low as reasonably practicable. The adequacy of the internal control system is assessed at least once a year.

Control of documented information is prescribed for GPSC's internal controls that are documented in writing in accordance with the Company's standards. This includes management system manuals, procedures, work instructions, support documents, and forms for all work processes of the Company.

GPSC has designed appropriate internal control systems at both corporate and functional levels and integrate them into both manual processes, in which authorization is carried out through the process of proposal and consideration by individuals, and automated processes, which takes place on an ICT system and in which the authority for operations and business transactions of the supervisors of different divisions has been defined in accordance with the Table of Authority in writing.

- 3.2 GPSC has reviewed and revised its information and communication technology compliance standards to ensure alignment with the Computer-related Crime Act B.E. 2560 and other relevant laws as well as the IT policy of PPT Group. The Company has also formulated the Information and Communication Technology Policy Standard Practice B.E. 2560 and implemented standard information technology security controls.

- 3.3 GPSC has formulated its compliance policy for the directors, management and employees to follow when performing their duties to ensure that the Company conducts its business in full compliance with relevant laws, rules, regulations, notifications, and announcements, both internal and external. In addition, the Company has instituted work-related regulations and defined standards of conduct and misconduct along with disciplinary actions for cases of non-compliance with laws, regulations, or lawful orders of the company or supervisors that incur damage for the company. Furthermore, each unit has developed policies and operational manuals to establish good work standards and internal control design.

4. INFORMATION AND COMMUNICATION

GPSC values the quality of information and communication, which is a crucial part enabling effective internal control. It has information management guidelines by designing general control technology appropriately and sufficiently as follows:

- 4.1 In business operations, the Company provides a database for all systems for daily operations and other purposes. The information in the database is regularly reviewed and updated for accuracy and equipped with data security measures.

GPSC compiles and reviews all relevant information from both internal and external sources, whether primary or secondary, to inform its analysis and decision making, taking into considering the cost of data acquisition. If information from external sources is essential, the Company will screen the information obtained from credible sources and may consider hiring external experts to conduct a study and compile necessary data for the consideration of material issues.

4.2 GPSC commands processes and channels to communicate internal information appropriately and effectively, such as public relations, electronic mail, reporting processes, organizing activities via the intranet system, among others. In addition, there are suggestion boxes managed by HR and Organizational Development to handle confidential information. In addition, GPSC has put in place three whistleblowing channels as follows:

- 1) **Letter addressed to:**
Global Power Synergy Public Company Limited
555/2 Energy Complex Building B, 5th Floor,
Vibhavadi - Rangsit Road, Chatuchak Sub - district,
Chatuchak District, Bangkok 10900
- 2) **E - mail:**
company - secretary@gpscgroup.com
- 3) **GPSC Website:**
<http://www.gpscgroup.com/th/cg/whistle-blowing>

GPSC has communicated its complaint handling and whistleblower protection policy to both its employees and third parties and further improved its complaint handling by adding complaint filing channels, to be made public in 2020.

- 4.3 According to the Company's good governance policy, the Board is required to timely and equally disclose sufficient and reliable information (both financial and non-financial matters) to shareholders and stakeholders. Public Relations and Investor Relations are responsible for providing information to investors and the public.

5. MONITORING AND ASSESSMENT

GPSC commands processes to monitor and evaluate the adequacy of internal control, together with constant improvement, to ensure that its internal control system is efficient and effective:

- 5.1 GPSC conducted internal control self-assessment at the functional units. It also monitored and assessed the internal control system regularly by Internal Audit that performs under the International Standards for Professional Practice of Internal Auditing (IIA) and reports directly to the Audit Committee. The unit developed risk-based audit plans by using criteria such as major risks, efficiency of internal control and management's opinions. It is to report discrepancies to the Audit Committee and inform the management to acknowledge and take corrective action in a timely manner.

- 5.2 The Internal Audit communicates internal control risks to relevant parties through wrap-up meetings and exit meetings and compiles audit reports, which inform unit managers and the President and CEO of these risks and enable them to determine solutions to each internal control deficiency and the timeframe for each solution in order of urgency, so that the risks can be averted in time. The Internal Audit will then report the audit results and the progress of the rectification to the Audit Committee.

In the event that the Internal Audit discovers or suspects transactions or actions that may seriously damage the Company's operations, conflicts of interest, fraud, material irregularities or defects in the internal control system, infringement of laws related to the Securities and the Stock Exchange, SET rules, or other laws relevant to the Company's business, the head of the Internal Audit must immediately review the findings and report their opinions to the Audit Committee and the top executives, upon which the Audit Committee is required to report the incident to the Board of Directors instantly, so that it can be rectified without delay as stipulated in the Charters of the Audit Committee and GPSC's Internal Audit.

QUALITY, SECURITY, SAFETY, OCCUPATIONAL HEALTH, AND ENVIRONMENTAL MANAGEMENT

Global Power Synergy Public Company Limited (GPSC) and its invested companies recognize and value quality, security, safety, occupational health, and environment (QSHE) as a core component for its excellence in business growth and sustainability by being responsible to stakeholders. It also serves as a platform for developing this Power Flagship of PTT Group in the management of power generation and public utilities innovations to deliver sustainable value to stakeholders. The current QSHE policy integrates all units, tasks to achieve operational excellence and respond to internal and external stakeholders' expectations as follows.

QSHE POLICY

QSHE is an essential component of GPSC Group's businesses. In pursuit of excellence, GPSC strives to continually improve the effectiveness of its operations in line with corporate governance to secure acceptance from stakeholders and sustainability in the power and utilities business.

GPSC Group's QSHE culture is to maintain full awareness among its workforce and manage their QSHE risks to deliver products and service to stakeholders in line with its following values:

1. Strictly comply with QSHE laws as well as applicable corporate requirements and international standards and consider them as baseline requirements.
2. Apply integrated management systems and digital management systems that are in compliance with the management standards of PPT Group in order to enhance operational efficiency and ensure the ability to produce or supply and deliver products in the quantity, quality, and method agreed upon with the customer.
3. Control, prevent, and reduce environmental impacts by maximizing resource efficiency in accordance with the principle of circular economy; safeguarding biodiversity and ecosystems in compliance with relevant international standards; and placing emphasis on at-source pollution prevention, energy efficiency improvement, as well as global warming mitigation and adaptation with the goal of achieving a low-carbon society.

4. Prevent potential losses and damages to life, property, and production arising by incidents; establish emergency and crisis management measures to ensure business continuity; promote occupational health and workplace safety; protect the organization from security threats and safeguard cybersecurity by implementing stringent security standards and measures in accordance with the Universal Declaration of Human Rights.
5. Foster and maintain a safety culture as well as implement process safety management for the safety of all involved.
6. Control and develop operations with top priority on quality, safety, security, health and the environment, ranging from design, construction, installation of machinery, testing, production, maintenance, delivery, and storage of raw materials, chemical substances and products.
7. Employ research and development (R&D) to generate electricity and steam from alternative or renewable-energy sources or green products.
8. Sufficiently allocate resources for operations and continuous improvement of staff, time frame, and budgets, including appropriate and adequate training.
9. Communicate QSHE initiatives and their outcomes to both internal and external stakeholders in a transparent manner as well as listen to the feedback and expectations of all stakeholders and use them in the reviewing and improving of the Company's operations.

It is the duty of all executive officers at every level, employees, and relevant parties to comply with GPSC's QSHE policy as set forth here.

QUALITY MANAGEMENT

GPSC has adopted an ISO 9001 Quality Management System, which is an international standard system, and has been ISO 9001:2015 certified by MASCI. In addition, it has introduced a Total Productive Maintenance (TPM) system to its business to maintain its operational efficiency and reduce losses in the hope of winning the TPM Consistency Award from Japan Institute of Plant Maintenance (JIPM). GPSC has also integrated an Operational Excellence Management System (OEMS) into its operations to improve the efficiency of its production, services, product quality enhancement, and work processes for the satisfaction of its customers, suppliers, and stakeholders.

The quality management of Glow Energy Public Company Limited adheres to the quality management framework of ISO 9001.

SECURITY, SAFETY AND OCCUPATIONAL HEALTH MANAGEMENT

GPSC strives to foster operational excellence and accomplish its missions by highlighting the importance on the occupational health and workplace safety. It has also prescribed risk assessment and identification for every work process and operation of the Company, so that it can introduce measures to reduce and control risks (hazards) that may lead to loss of life, injuries, sickness, as well as impact on communities and the environment. Emphasis has also been placed on the inspection of production efficiency, machinery readiness, sufficient and appropriate management measures, as well as strict compliance with laws related to security, safety, occupational health, and environment—all under the overarching vision of becoming a zero - incident organization.

Similarly, Glow Energy Public Company Limited recognizes the importance of the health and safety of its workers and seeks to reduce and remove hazards by introducing preventive measures and efficient controls in tandem with the cultivation of proper safety behavior in the workplace to optimize the occupational health and safety.

STRATEGIES FOR SUCCESS

To lower and control risks of work-related losses of lives, injuries, and illnesses for employees and contractors - with impacts on work disruption and business continuity—GPSC is committed to complying with the scope of the QSHE Policy by cultivating the “we SAFE” corporate culture to promote the safety attitude of “Work safely, pay attention to everyone’s safety, think before acting, and stop if unsafe”. Below are GPSC’s guidelines promoting job safety for employees and contractors:

- Setting and announcing a Quality, Security, Safety, Health, and Environmental Policy
- Appointing a Safety, Occupational Health and Environment Committee
- Contractor safety management
- Health risk assessment
- Management of industrial hygiene and the Fit to Work program

- Safety Manual for employees and contractors
- A credible system to collect data on performance outcomes of health and safety, attested by a third - party agency
- Promotion of the “we SAFE” corporate culture with measurable scores through the assessment of the security, safety, health, and environmental culture
- Management of process safety and personal safety
- Short - term and long - term strategic goals for health and safety operation
- Establishment of a suggestion program for sub - standards reports and incident report and investigation program
- Health and safety management under ISO 45001:2018 and TIS 18001:2554
- Management of work environment

As for Glow Energy Public Company Limited, a Health and Safety Policy and an Environmental, Health, and Safety Management System (EHSMS) Manual have been developed as corporate governance guidance for the entire group. In addition, all Glows’ power plants in Thailand are OHSAS 18001:2007 certified. To ensure that its operations are in alignment with the aforementioned policy and foster participation among employees and contractors, the Company has put in place the following activities:

- Promotion of behavior - based safety (BBS) across the organization
- Contractor safety assessment
- Stop Work Authority (SWA)
- Managing Rule - Breaking (MBR)
- On - site job safety analysis
- Fresh eye observation
- Environmental excursion and incident reports and near - miss reports
- Review of risk assessment inventory
- Occupational health and safety training for employees and contractors
- Assessment of health risks, depression, and stress

PERFORMANCE OUTCOMES

PROCESS SAFETY

GPSC recognizes that efficient process safety management can prevent risks of severe accidents and can serve as the operation scope throughout GPSC's value chain by taking into consideration its vision, mission, values, and safety corporate culture. That is why it cultivates and applies best-practices principles in parallel with modern technologies, ranging from engineering design, production operation, maintenance, to the management of hazardous waste.

- GPSC manages work process safety through OEMS and ISO management systems. Thanks to its robust compliance with laws and PTT Group's business direction, the company has won MASCI's certification of its TIS/OHSAS 18001 system and retained the certification since 2014. In addition, as GPSC has also been developing its management systems consistently, it has successfully obtained the ISO 45001:2018 Occupational Health and Safety Management Systems certification and achieved an Integrated Management System (IMS)
- Glow Energy Public Company Limited has planned to switch its standard certification from OHSAS 18001:2007 to ISO 45001:2018 by 2020.

PERSONAL SAFETY

- Given how indispensable human resources are to efficient business operations, GPSC has focused its efforts on equipping its employees with knowledge, skills, competencies, and preparedness and, more importantly, on their life safety, work-related illness prevention, and the protection of the company's assets. To this end, all employees and contractors are required to undergo basic and job-specific safety training sessions from their first day of work. These training sessions encompass topics such as personal safety and physical readiness before starting an operation, regulations related to operational safety, safety apparel and protective clothing, and the use of personal protective equipment. For Glow Energy Public Company Limited, the same concern has been emphasized, and the same practices have been implemented for its employees and contractors.
- Personal safety concerning physical readiness before the start of work, rules or good practices for work safety, safe uniforms, to the use of personal protective equipment.

COMPLIANCE WITH APPLICABLE OCCUPATIONAL HEALTH AND SAFETY LAWS

GPSC attaches great significance to compliance with relevant occupational health and safety laws. To this end, it consistently develops the knowledge and skills of its employees and contractors and cultivates safety awareness to ensure that they can operate in strict compliance with relevant laws. The company also provides health and safety training for all new recruits and all employees as part of the annual training plan, in line with the QSHE Policy as well as relevant laws and regulations. Alongside these initiatives, GPSC also fosters confidence and trust in its stakeholders as well as the communities in the vicinity of its businesses.

In addition, GPSC has appointed a Safety, Occupational Health and Environment Committee, which consists of executives, operators, and work safety officers at Head Office and its power plants. Meetings take place at least once a month to report and acknowledge recommendations on corrective actions to align with work safety laws and work safety standards. Also, at its meetings the committee constantly advocates work safety activities and monitors safety performances, while the data received are used in defining and developing operating plans.

Glow Energy Public Limited Company also recognizes the significance of compliance with occupational health and safety laws as well as other relevant laws and places great importance on the matter. As such, it has prescribed compliance audit as has GPSC.

VISION, VALUES, AND SAFETY CULTURE

GPSC actively forges the recognition and awareness of safety among its executives, employees, and all site workers under the vision of zero accident for workers, corporate values, and the "we SAFE" culture ("Work safely, pay attention to everyone's safety, think before acting, and stop if unsafe"). The aim is to remain accident-free and injury-free, with which everyone is required to observe and comply an active and relentless way. To ensure that this culture remains suitable to operating circumstances, GPSC launches a survey of adherence to the culture of security, safety, occupational health, and the environment (SSHE) every three years, (carried out twice so far in 2017 and 2019 respectively), in order to identify its weaknesses and strengths and generate appropriate solutions and/or formulate guidelines for improve employees' behaviors. The target groups of the survey are the top executives, management, supervisors, regular employees, and employees





paid on a lump sum pay basis at all headquarters and power plants. GPSC's short-term and long-term goal is to achieve zero lost time injury frequency (LTIF) rate and total recordable injury rate (TRIR). In addition, it has also included occupational health and safety performance as one of the key performance indicators (KPIs) on the corporate level. Thanks to its active and continuous efforts, GPSC has successfully accomplished its goal and maintained the status of a zero-LTIF organizations since 2013 (as of December 2019), logging a total of 9,440,929 cumulative man hours without lost-time injury (including the hours worked by both employees and contractors). The next goal is to achieve 10,000,000 cumulative safe man hours.

Glow Energy Public Company Limited consistently measures the outcomes of its safety management through key performance indicators (KPIs) such as the frequency rate (FR) of occupational accidents and the absence of major incidents.

Maintained the status of
a zero-LTIF organizations

9,440,929

(2013 - Dec 2019)

The next goal is to achieve

10 Million

cumulative safe man hours

ENVIRONMENTAL MANAGEMENT

In addition to strict compliance with laws, regulations, and preventive measures required by Environmental Impact Assessment (EIA) reports, GPSC has adopted the ISO 14001 Environmental Management System to manage and continually improve all environmental work processes, which consist of air and water pollution control at sources; award of ISO 14001:2015 certification by MASCI; waste management using the 3Rs principle (Reduce, Reuse, and Recycle); and 100% zero-waste landfill disposal. In addition, it constantly strived to improve its environmental efficiency under the Green Industry criteria for even more environmental friendliness, evident in its Green Industry Level 4 Award by the Ministry of Industry. It also continued its project on energy conservation, greenhouse gas emission management, maximization of the efficiency and effectiveness of resource consumption, and minimization of environmental, social, and health impacts on stakeholders. To systematically measure the effectiveness of environmental protection, GPSC has adopted the

Eco-Efficiency philosophy and index, including water use, energy use, wastewater generation, global warming contribution, and ozone depletion. The overall objectives are to maximize the efficiency of resource consumption and reduce the environmental impacts of activities and processes. Such green business conduct benefits GPSC's undertaking as well as future national environmental management.

Moreover, GPSC regularly provides its employees with training courses related to environment management, such as safety and environmental laws and regulations, ISO 14001, ISO 45001, and TIS 18001, Pollution Management Program, and Environmental Pollution Prevention Program. In addition, guided by its commitment to continuous environmental improvement, GPSC ensures that its business operations are environmentally conscious, driven by sustainable development, and in alignment with sustainable development goal (SDGs).



UNDERLYING ALL OPERATION WITH ENVIRONMENTAL CONSIDERATION

STRIVING FOR GREATER
PROPORTIONS OF CLEAN ENERGY



SECURITIES AND SHAREHOLDERS INFORMATION

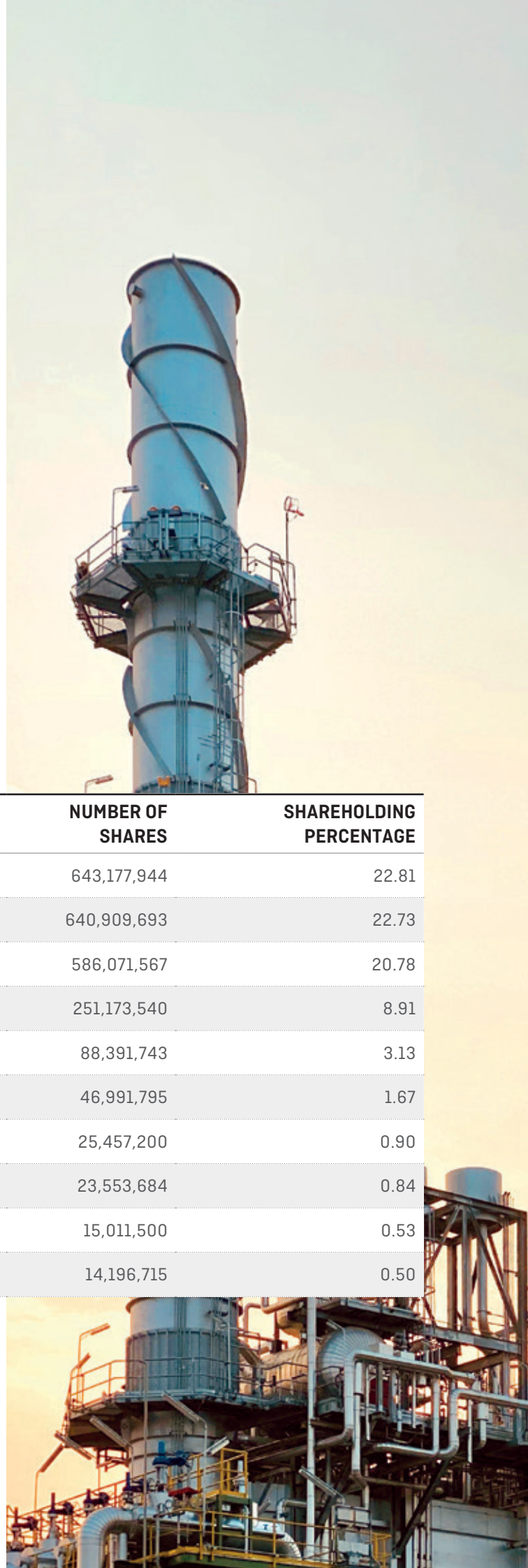
REGISTERED CAPITAL AND PAID - UP CAPITAL

Global Power Synergy Public Company Limited (GPSC) is a listed company on the Stock Exchange of Thailand with a total registered capital of THB 28,197,293,670 as at December 31, 2019, fully paid up and divided into a total of 2,819,729,367 ordinary shares with a par value of THB 10 per share.

The First ten major shareholders as of the Record Date to determine the shareholders who are entitled to receive dividend payment for the 2019 (December 26, 2019) are as follows:

NO.	MAJOR SHAREHOLDER	NUMBER OF SHARES	SHAREHOLDING PERCENTAGE
1	PTT Public Company Limited	643,177,944	22.81
2	PTT Global Chemical Public Company	640,909,693	22.73
3	Thaioil Power Company Limited	586,071,567	20.78
4	Thai Oil Public Company Limited	251,173,540	8.91
5	Thai NDVR Company Limited	88,391,743	3.13
6	Social Security Office	46,991,795	1.67
7	Bualuang Long - Term Equity Fund	25,457,200	0.90
8	South East Asia Uk (Type C) Nominees Limited	23,553,684	0.84
9	Bualuang Top Ten Open - End Fund	15,011,500	0.53
10	State Street Europe Limited	14,196,715	0.50

Remark: The data of the Company's majority shareholders above was recorded at the book closing date on December 26, 2019 and was the latest data available as of the date of the compilation of this report.



LIMITATIONS OF TRANSFERRING OF SHARES

There is no limitation except the case of transferring of shares to foreign investors that cause such foreign investors to own more than 49% of total shares of GPSC.

DIVIDEND POLICY

1. GPSC'S DIVIDEND POLICY

GPSC has a policy to pay dividends at the minimum of 30% of net profit according to financial statements after deduction of tax, capital reserves as specified in applicable laws, and the commitment as in terms of credit facility agreement. Payment of dividends is subject to the cash flow and investment plans of GPSC and its subsidiaries. The Board of Directors may consider paying the annual dividends with approval from the Annual General Meeting of Shareholders (AGM), except interim dividend payment which the Board of Directors has the authority to approve before reporting the interim dividend to the shareholders at the next shareholders' meeting.

DIVIDEND PAYMENT (THB/SHARE) SINCE GPSC HAS BEEN LISTED ON THE STOCK EXCHANGE OF THAILAND

YEAR	DIVIDEND PAYMENT (THB/SHARE)			DIVIDEND PAYOUT RATIO (%)
	FIRST HALF	SECOND HALF	FULL YEAR	
2015	0.35	0.60	0.95	75
2016	0.45	0.70	1.15	64
2017	0.45	0.80	1.25	59
2018	0.45	0.80	1.25	56
2019	0.50	0.80	1.30*	74

Remark: * The Board of Directors at the Meeting No. 2/2020 dated February 12, 2020, has passed a resolution to propose that the 2020 Annual General Meeting of Shareholders approve a dividend payment from the 2019 operating results of GPSC and its subsidiaries at THB 1.30 per share, or 74% of the net profit of the consolidated financial statements of 2019. The interim dividend for the first half operating results of 2018 (January - June 2019) was paid at THB 0.50 per share on September 10, 2019. The remaining dividend for the second half operating results for 2018 (July - December, 2019) will be paid at THB 0.80 per share. However, the rights to receive dividend payment is subject to the approval of the 2020 Annual General Meeting of Shareholders.

2. SUBSIDIARIES' DIVIDEND POLICY

The Board of Directors of each subsidiary considers paying the annual dividend with approval from their shareholders meeting in each year. The dividend payment of subsidiaries is based on the investment plans and other requirements such as cash flow of each subsidiary after deduction of capital reserves required by law.

GPSC BOARD OF DIRECTORS



01 **Mr. Pailin Chuchottaworn**
Chairman of the Board / Independent Director

02 **Mr. Kurujit Nakornthap**
Independent Director / Chairman of
the Corporate Governance Committee /
Chairman of the Audit Committee

03 **Mr. Payungsak Chartsutipol**
Independent Director / Chairman of
the Risk Management Committee /
Chairman of the Nomination and
Remuneration Committee

04 **Maj.Gen. Chaowalek
Chayansupap**
Independent Director / Member of the Audit
Committee / Member of the Nomination and
Remuneration Committee

05 **Mrs. Nicha Hiranburana
Thuvatham**
Independent Director / Member of
the Corporate Governance Committee /
Member of the Audit Committee

06 **Mr. Wittawat Svasti - Xuto**
Director / Member of the Nomination and
Remuneration Committee / Member of
the Risk Management Committee

07 **Mr. Wuttikorn Stithit**
Director



08

Ms. Peangpanor BoonklumDirector / Member of the Corporate
Governance Committee

09

Mr. Wirat UanarumitDirector / Member of Risk Management
Committee

10

Mr. Kongkrapan IntarajangDirector / Member of the Risk Management
Committee

11

Mr. Bandhit ThamprajamchitDirector / Member of the Corporate
Governance Committee

12

Mr. Boonchai Chunhawiksit

Director

13

Mr. Chawalit TippawanichDirector / Secretary to the Board /
Member of the Risk Management
Committee / President and Chief
Executive Officer

DIRECTORS' PROFILE

As of December 31, 2019

MR. PAILIN CHUCHOTTAWORN

Chairman of the Board / Independent Director (Non - Executive Director)

DATE APPOINTED

September 1, 2019 (1st Term)

AGE: 63

EDUCATION

- Doctor of Engineering in Chemical Engineering from Tokyo Institute of Technology Japan (Japanese government scholarship)
- Master of Engineering in Chemical Engineering from Tokyo Institute of Technology Japan (Japanese government scholarship)
- Bachelor of Engineering in Chemical Engineering with 1st Class Honor, Chulalongkorn University

TRAINING RECORD WITH

THAI INSTITUTE OF DIRECTORS (IOD)

- Director Certification Program (DCP 51/2004)
- Director Accreditation Program (DAP 24/2004)
- Finance for Non - Finance Directors (FND 14/2004)
- Anti - corruption for Executive Program (ACEP 4/2012)

OTHER TRAINING RECORD

- Diploma, The Joint State - Private Sector Course, National Defence College (Class of 22nd), National Defence College
- Corporate Governance Program for Directors and Executives of State Enterprises and Public Organizations (Class of 7th), King Prajadhipok's Institute
- Certificate in Top Executives in the Energy Education Program (Class of 1st), Thailand Energy Academy (TEA)
- PTT - GE Executive Leadership Program 2008, GE Crotonville, U.S.A.
- NIDA-Wharton Executive Leadership Program 2007, Wharton University of Pennsylvania, U.S.A.
- Top Executive Program (Class of 8th), Capital Market Academy (CMA)
- Top Executive Program in Commerce and Trade (TEPCoT) (Class of 1st), Commerce Academy
- Industrial Liaison Program (ILP) 2005, Massachusetts Institute of Technology, U.S.A.

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company - The Stock Exchange of Thailand 1 Organization

- Independent Director / Member of the Executive Committee / Member of the Technology Committee
The Siam Commercial Bank Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 2 Organizations

- Chairman of VISTEC Council, Vidyasirimedhi Institute
- Chairman of the Board of Governors, Kamnoetvidya Science Academy

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Mar 11, 2019 - Present	Advisor to the Prime Minister
2017 - Jul 15, 2019	Deputy Minister of Transport
2015 - Nov 17, 2017	Director of Thai Institute of Directors
2015 - Nov 17, 2017	Chairman of VISTEC Council, Vidyasirimedhi Institute
2015 - Nov 17, 2017	Chairman of the Board of Governors, Kamnoetvidya Science Academy
2016 - Nov 17, 2017	Expert Commissioners, Public Organization Development and Promotion Committee
2016 - Nov 17, 2017	Expert Commissioners, The Securities and Exchange Commission
2016 - Nov 17, 2017	Expert Commissioners, National Research Council of Thailand
2016 - Jul 31, 2017	Director, Bangkok Bank Public Company Limited
2016 - 2017	Director of the Faculty of Economics, Thammasat University
2017 - Nov 17, 2017	Director, Power of Innovation and Power of Learning
2017 - Nov 17, 2017	Director of the University Council, Kasetsart University
2017 - Nov 17, 2017	Subcommittee on Personnel Development, Research and Innovation National, Research and Innovation Policy Council
2017 - Nov 17, 2017	Independent Committee for Education Reform
2017 - Nov 17, 2017	Expert Member, Board of Directors, Ministry of Digital Economy and Society
2017 - Nov 17, 2017	Expert Member, Committee on Education Management Development Collaboration with High - Potential Foreign Higher Education Institutions
2017 - Nov 17, 2017	Director, Committee National Quality Award, Office Institute for Productivity
2017 - Nov 17, 2017	Advisor, Chulalongkorn University Council Board of Commissioners, Digital Economy Promotion Agency
2015 - 2017	Member of the Committee for Special Economic Zone Development Bureau of Industrial Potential of the Nation Office of Industrial Economics Ministry of Industry
2015 - 2017	Advisor, Sasin Graduate Institute of Business Administration of Chulalongkorn University
2011 - Sep 9, 2015	President and CEO of PTT Public Company Limited

SHAREHOLDING IN GPSC (INCLUDING SPOUSE AND MINOR)

- None

QUALIFIED ACCORDING TO RELATED LAWS AND DOES NOT HAVE PROHIBITED QUALIFICATIONS

- Qualified

FAMILY RELATION WITH OTHER DIRECTORS, EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC AND ITS SUBSIDIARIES

- None

MR. KURUJIT NAKORNTHAP

Independent Director / Chairman of the Corporate Governance Committee / Chairman of the Audit Committee (Non - Executive Director)

DATE APPOINTED

April 3, 2017 (1st Term)

AGE: 64

EDUCATION

- Ph.D. in Petroleum Engineering, University of Oklahoma, U.S.A.
- Master of Science in Petroleum Engineering, University of Oklahoma, U.S.A.
- Bachelor of Science (Special Distinction) in Petroleum Engineering, University of Oklahoma, U.S.A.

TRAINING RECORD WITH**THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Accreditation Program (DAP 64/2007)
- Audit Committee Program (ACP 32/2010)
- Role of Compensation Committee (RCC 12/2011)
- R-CF - Chairman Forum (R-CF 2/2013)
- Collective Action Against Corruption Conference (C-Conference 1/2014)

OTHER TRAINING RECORD

- The National Defence Course (Batch 51), National Defence College
- Top Executive Program in Commerce and Trade (TEPCoT) (Batch 3), Commerce Academy, University of the Thai Chamber of Commerce
- Training Course on Administrative Justice for Executives, (Batch 2), Office of the Administrative Courts of Thailand
- Capital Market Academy Leader Program (Batch 13), Capital Market Academy
- Top Executives in the Energy Education Program (Batch 1), Thailand Energy Academy
- Bhumipalung Phandin Course for Executives (Batch 2), Chulalongkorn University
- Civil Service Executive Program: Visionary and Moral Leadership, (Batch 46), Office of the Civil Service Commission
- Senior Executive Program (SEP), (Batch 60), London Business School, United Kingdom
- Training Course on Leadership for Change (Batch 2), Right Livelihood Foundation & Matichon Publishing Group
- Systematic Problem Solving and Decision Making (SPSDM), Office of the Civil Service Commission in cooperation with ACI Consultants Company Limited
- Academic Seminar: Money Laundering
- Seminar: Anti-corruption: Leadership Role of the Board

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Independent Director, Padaeng Industry Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 5 Organizations

- Executive Director, Petroleum Institute of Thailand Foundation
- Member of the Council of State
- Co-Chairman (Thailand), Malaysia - Thailand Joint Authority
- Member of the University Council, Khon Kaen University
- Chairman, Thailand Greenhouse Gas Management Organization (Public Organization)

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

- | | |
|-----------------------|---|
| Oct, 2015 - Aug, 2017 | Chairman of Energy Affairs Committee and Member of the National Reform Steering Assembly (NRSA) |
| Feb, 2016 - Oct, 2016 | Executive Member of the National Research Council of Thailand |
| Jun, 2015 - Sep, 2015 | Permanent Secretary, Ministry of Energy |
| Oct, 2014 - Jun, 2015 | Deputy Permanent Secretary, Ministry of Energy |
| Oct, 2014 - Sep, 2015 | Member of National Reform Steering Assembly |
| Jul, 2014 - Sep, 2014 | Director - General, Department of Mineral Fuels, Ministry of Energy |
| 2011 - 2014/2015 | Director and Chairman of the Board, Electricity Generating Authority of Thailand |

SHAREHOLDING IN GPSC**(INCLUDING SPOUSE AND MINOR)**

Self: 57,029 shares (0.002022%)

QUALIFIED ACCORDING TO RELATED LAWS AND DOES NOT HAVE PROHIBITED QUALIFICATIONS

- Qualified

FAMILY RELATION WITH OTHER DIRECTORS, EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC AND ITS SUBSIDIARIES

- None

MR. PAYUNGSACK CHARTSUTIPOL

Independent Director / Chairman of the Risk Management Committee /
Chairman of the Nomination and Remuneration Committee
(Non - Executive Director)

DATE APPOINTED

April 3, 2018 (3rd Term)
April 2, 2015 (2nd Term)
November 27, 2014 (1st Term)

AGE: 67

EDUCATION

- Honorary Doctorate Degree in Engineering, Suranaree University of Technology
- Honorary Doctorate Degree in Philosophy, Organization Development Administration, Chaopraya University
- Certificate of Management Development Program, Northwestern University, U.S.A.
- Bachelor of Engineering (Electrical Engineering), Chulalongkorn University

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Accreditation Program (DAP SCC/2004)
- Risk Management Program for Corporate Leaders (RCL 3/2016)

OTHER TRAINING RECORD

- Top Executives in the Energy Education Program (Batch 1), Thailand Energy Academy
- Executive Program, Poompalungpandin Program (Batch 1), Chulalongkorn University
- Administrative Justice for Executives (Batch 2), Administrative Court
- Capital Market Academy Leader Program (Batch 11), Capital Market Academy
- Top Executive Program in Commerce and Trade (TEPCoT) (Batch 2), Commerce Academy, University of the Thai Chamber of Commerce

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 2 Organizations

- Chairman, Glow Energy Public Company Limited
- Independent Director / Chairman of the Corporate Governance and Sustainability Committee, Global Green Chemicals Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 11 Organizations

- Chairman, Siam City Leasing and Factoring Public Company Limited
- Director, Linde (Thailand) Public Company Limited
- Director, Siam United Steel (1995) Company Limited
- Independent Director / Chairman of Corporate Governance Committee / Chairman of Audit Committee, Krungthai Panich Insurance Public Company Limited
- Independent Director / Vice Chairman, Sapthip Company Limited
- Director, Glow Company Limited
- Director, Glow SPP 2 Company Limited
- Director, Glow SPP 3 Company Limited
- Director, Glow IPP 2 Holding Company Limited
- Director, Glow SPP 11 Company Limited
- Director, Glow IPP Company Limited

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

2017 - Mar 4, 2019	Chairman of the Audit Committee, Global Power Synergy Public Company Limited
2016 - 2017	Chairman of the Corporate Governance Committee, Global Power Synergy Public Company Limited
2015 - 2016	Member of the Corporate Governance Committee, Global Power Synergy Public Company Limited
2012 - 2014	Director, Office of Insurance Commission
2012 - 2013	Director / Chairman of the Corporate Governance and Social Responsibility Committee, Krungthai Bank Public Company Limited
2011 - 2015	Chairman / Qualified Member, Board of National Catastrophe Insurance Fund Committee
2011 - 2014	Chairman, Board of Executive Directors, Krungthai Bank Public Company Limited
2010 - 2014	Chairman, The Federation of Thai Industries
2010 - 2014	Member of the Council Office, Suranaree University of Technology
2010 - 2014	Director, Board of Investment
2010 - 2011	Director, Samaggi Insurance Public Company Limited
2007 - 2014	Director, Board of Trustees, Sirindhorn International Institute of Technology Thammasat University

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

Self: 138,789 shares (0.004922%)

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MAJ.GEN. CHAOWALEK CHAYANSUPAP

Independent Director / Member of the Audit Committee / Member of the Nomination and Remuneration Committee (Non - Executive Director)

DATE APPOINTED

April 1, 2019 (3rd Term)
April 4, 2016 (2nd Term)
January 20, 2016 (1st Term)

AGE: 63

EDUCATION

- Bachelor of Science, Chulachomklao Royal Military Academy

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 217/2016)
- Advanced Audit Committee Program (AAP 24/2016)

OTHER TRAINING RECORD

- Top Executives in the Energy Education Program (Batch 9), Thailand Energy Academy
- Officer Basic Course, Infantry School, Infantry Center
- Officer Advance Course, Infantry School, Infantry Center
- Logistics Management Course, The Royal Thai Army Logistics School
- Command and General Staff Course, Command and General Staff College
- Officer Comptroller General Course (Manager Level), Army School, Military Finance Department

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand

- None

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand)

- None

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

2016 - 2017 Member of the Corporate Governance Committee,
Global Power Synergy Public Company Limited

2013 - 2016 Army Expertise, Royal Thai Army

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

- None

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MRS. NICHIA HIRANBURANA THUVATHAM

Independent Director / Member of the Corporate Governance Committee / Member of the Audit Committee (Non-Executive Director)

DATE APPOINTED

April 3, 2018 (1st Term)

AGE: 51

EDUCATION

- Master's Degree, International Studies, Ohio University, U.S.A. (Foreign Student Scholarship)
- Bachelor of Political Science (Second Class Honors), Chulalongkorn University

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Accreditation Program (DAP 164/2019)

OTHER TRAINING RECORD

- Senior Management Course - Visionary and Ethical Leadership, Office of the Civil Service Commission
- Advanced Certificate Course in Promotion of Peaceful Society, King Prajadhipok's Institute
- Human Resources Management for Public Sector, Office of the Civil Service Commission
- Public Sector Management Certificate

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand

- None

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 2 Organizations

- Deputy Secretary-General to the Prime Minister for Administrative Affairs, Secretariat of the Prime Minister Office of the Prime Minister
- Deputy Director, Prime Minister Delivery Unit

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Mar 7, 2016 Deputy Secretary-General to the Prime Minister for Administrative Affairs, Secretariat of the Prime Minister Office of the Prime Minister

Deputy Director, Prime Minister Delivery Unit

Apr 1, 2015 Assistant Secretary-General to the Prime Minister

2010 - 2014 Advisor to the Prime Minister on Social, Secretariat of the Prime Minister

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

- None

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MR. WITTAWAT SVASTI – XUTO

Director / Member of the Nomination and Remuneration Committee /
Member of the Risk Management Committee (Non – Executive Director)

DATE APPOINTED

April 1, 2019 (2nd Term)
September 19, 2018 (1st Term)

AGE: 58

EDUCATION

- Master of Science (Industrial Engineering),
The University of Rhode Island
- Bachelor of Engineering, Chulalongkorn University

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 146/2011)
- Financial Statements for Directors Program (FSD 12/2011)

OTHER TRAINING RECORD

- Capital Market Academy Leader Program (Batch 27/2018),
Capital Market Academy
- Top Executives in the Energy Education Program (Batch 11),
Thailand Energy Academy
- The National Defence Course (Batch 59),
National Defence College
- Strategy and Innovation for Business in Asia (SIBA) (Batch 5), 2016

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 2 Organizations

- Chief Technology and Engineering Officer,
PTT Public Company Limited
- Director, PTT Global Chemical Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 1 Organization

- Director, PTT Energy Solutions Company Limited

WORKING EXPERIENCE (5 – YEAR PAST EXPERIENCE)

Sep 16, 2018 - Present	Chief Technology and Engineering Officer, PTT Public Company Limited
Jan 1, 2018 - Sep 15, 2018	Senior Executive Vice President, Innovation and Digital, PTT Public Company Limited
Jan 1, 2017 - Dec 31, 2017	Senior Executive Vice President, Sustainability Management and Project Engineering, PTT Public Company Limited
Oct 1, 2016 - Dec 31, 2016	Senior Executive Vice President, Sustainability Management, PTT Public Company Limited
Jan 1, 2016 - Sep 30, 2016	Executive Vice President Downstream Business Group Alignment, PTT Public Company Limited

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

Self: 57,029 shares (0.002022%)

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MR. WUTTIKORN STITHIT

Director (Non – Executive Director)

DATE APPOINTED

April 1, 2019 (1st Term)

AGE: 55

EDUCATION

- Master Degree Master of Business Administration
(Finance and Banking), Kasetsart University
- Master Degree M.S. (Science), Ohio University, U.S.A.
- Bachelor Degree Electrical Engineering,
King Mongkut's Institute of Technology Ladkrabang

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 158/2012)

OTHER TRAINING RECORD

- Leadership Development Program 3 (LDP3), PLLI
- Leadership Succession Program (LSP)
- Senior Executive Education Program, SIBA 2017
- Power of the Kingdom Class 4/2015 (Bhumipalung Phandin),
Chula Unisearch, Chulalongkorn University
- Leadership Development Program 2 (LDP2), PLLI
- Senior Executive Program, SASIN 2011

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Senior Executive Vice President, Gas Business Unit,
PTT Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 2 Organizations

- Chairman, PTT Global LNG Company Limited
- Chairman, PTT Natural Gas Distribution Company Limited

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Feb 1, 2018 - Present	Senior Executive Vice President, Gas Business Unit, PTT Public Company Limited
Nov 1, 2015 - Jan, 31 2018	Executive Vice President, Natural Gas Supply & Trading, PTT Public Company Limited
Nov 1, 2015 - Oct, 31 2015	Executive Vice President, Natural Gas Distribution, PTT Public Company Limited

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

Self: None

Spouse: 10,000 shares (0.000355%)

Total: 10,000 shares

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- Mrs. Sasitorn Stithit, Mr. Wuttikorn Stithit's spouse is serving as GPSC's Vice President, Human Resources and Organizational Effectiveness

MS. PEANGPANOR BOONKLUM

Director / Member of the Corporate Governance Committee
(Non - Executive Director)

DATE APPOINTED

April 3, 2017 (1st Term)

AGE: 53

EDUCATION

- Master of Law (LL.M.), Columbia University School of Law, U.S.A.
- Master of Law (LL.M.) (Business Law), Chulalongkorn University
- Bachelor of Law (Honors), Chulalongkorn University

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 7/2001)
- Anti - Corruption: The Practical Guide (ACPG 38/2017)
- Risk Management Program for Corporate Leaders (RCL 18/2019)
- Board Nomination and Compensation Program (BNCP 7/2019)

OTHER TRAINING RECORD

- TLCA Executive Development Program 1/2008, Thai Listed Companies Association
- Certificate in Anti - Corruption Strategic Management for Senior Executives, Class 9/2018, Office of the National Anti - Corruption Commission
- Leadership Development Program 3 (LDP3 Class 4), PTT Leadership and Learning Institute (PLLI)
- TIJ Executive Program on The Rule of Law and Development (TIJ RoLD 3/2019), Thailand Institute of Justice
- TIJ Workshop for Emerging Leaders on the Rule of Law and Policy (3/2019), Thailand Institute of Justice

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Senior Executive Vice President, Office of General Counsel, PTT Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 2 Organizations

- Director / Member of the Nomination and Remuneration Committee / Member of the Enterprise Risk Management Committee, PTT Oil and Retail Business Public Company Limited
- Chairman, Energy Complex Company Limited

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Oct 1, 2017 - Present	Senior Executive Vice President, Office of General Counsel
Jul 1, 2017 - Sep 30, 2017	Executive Vice President, Office of Corporate Legal, PTT
Dec 4, 2019 - Present	Chairman, Energy Complex Company Limited
Oct 24, 2018 - Present	Member of the Nomination and Remuneration Committee, PTT Oil and Retail Business Public Company Limited
Mar 9, 2018 - Present	Director, PTT Oil and Retail Business Public Company Limited
Oct 30, 2017 - Sep 30, 2018	Director at East Mediterranean Gas Company S.A.E. ("EMG"), Egypt
Jun 18, 2019 - Present	Vice President, Chulalongkorn University Alumni Association Under the Royal Patronage of His Majesty the King (CUAA) (Term 2019 - 2022)
Feb, 2017 - Jan, 2018	Member - Legal Expert, Finances and Assets Policy Committee, Srinakharinwirot University
Mar, 2016 - Jun, 2017	Senior Counsel, Weerawong, Chinnavat & Partners Company Limited (Former Company Name: "Weerawong, Chinnavat & Peangpanor Company Limited", Changed to the current name on April 3, 2017)
2013 - Mar 15, 2018	Advisor, Investment Banking Club, Association of Thai Securities Companies
2009 - Feb 29, 2016	Partner and Associate, Weerawong, Chinnavat & Peangpanor Company Limited
2012 - Present	Guest Lecturer, "Business Law: Business Organization and Corporate Governance", Executive MBA and MBA Programs, Sasin Graduate Institute of Business Administration of Chulalongkorn University
2019	Lecturer, "Role of the Promotion, Prevention, and Respect for Human Rights", Certificate of Human Rights for Executives, King Prajadhipok's Institute
2018 - Present	Lecturer, "Corporate Compliance for CFO", CFO in Practice, Federation of Accounting Professions Under the Royal Patronage of His Majesty the King (TFAC)

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

- None

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MR. WIRAT UANARUMIT

Director / Member of the Risk Management Committee
(Non - Executive Director)

DATE APPOINTED

September 1, 2019 (1st Term)

AGE: 57

EDUCATION

- Master of Business Administration, with emphasis in
Financial Management, Pennsylvania State University,
Pennsylvania, U.S.A.
- Bachelor of Engineering (Electrical Engineering),
Chulalongkorn University

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 8/2001)
- Director Certification Program Update (DCPU 5/2015)
- Audit Committee Program (ACP 38/2012)
- Ethical Leadership Program (ELP 7/2017)

OTHER TRAINING RECORD

- GE Global Customer Summit Crotonville
- Member, Beta Gamma Sigma
(US National Scholastic Honour Society in Business)
- Advance Management Programme,
INSEAD Business School, Fontainebleau, France
- Advanced Management Program (Class 184),
Harvard Business School, U.S.A.
- Capital Market Academy Leader Program, Class 4,
Capital Market Academy
- The Programme for Senior Executives on Justice
Administration, Class 16, Judicial Training Institute,
National Justice Academy
- Advanced Security Management Program, Class 2,
The National Defence College Association of Thailand (NDCAT)
- Executive Development Program (EDP), Class 1, Thai Listed
Companies Association (TLCA)
- The Joint State - Private Sector Course (Class 2013),
National Defence College
- Executive Management with Business Development and
Investment (Class 2), Institute of Business and Industrial
Development (IBID)
- Advanced Certificate Course in Politics and Governance
in Democratic Systems for Executives, Class 20,
King Prajadhipok's Institute
- The Rules of Law for Democracy (Class 6),
College of the Constitutional Court
- The Executive Program in Energy Literacy for
a Sustainable Future, Class 13, Thailand Energy Academy
- Thailand CG Forum: Governance as a Driving Force for
Business Sustainability, The Stock Exchange of Thailand

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Director and Secretary to the Board of Directors / Member of the Risk Management Committee / Chief Executive Officer and President, Thai Oil Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 18 Organizations

- Director and Chairman of the Board, Thai Lube Base Public Company Limited
- Director, Thaoil Solvent Company Limited
- Director and Chairman of the Board, Labix Company Limited
- Director and Chairman of the Board, TOP SPP Company Limited
- Director and Chairman of the Board, Thai Paraxylene Company Limited
- Director and Chairman of the Board, Thaoil Power Company Limited
- Director and Chairman of the Board, Thaoil Marine Company Limited
- Member of Council, Vidyasirimedhi Institute of Science and Technology
- Director, Power of Innovation Foundation
- Director, Power of Learning Foundation
- Executive Director, Thailand Swimming Association
- Member of Trustee (as Company representative), Petroleum Institute of Thailand (PTIT)
- Council of Trustee, Thailand Business Council of Sustainable Development (TBCSD)
- Advisor to the President, Association of Capital Market Academy (ACMA)
- Advisory Committee, Trade, Investment Promotion and Business Council, The Federation of Thai Industries
- Chairman, Thailand - Malaysia Business Council, The Federation of Thai Industries (FTI)
- Director / Member of Audit Committee, Thailand Management Association (TMA)
- Director, The Federation of Thai Industries (Term 2018-2020)

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Sep 1, 2019 - Present	Chief Operating Officer under Chief Operating Officer, Downstream Petroleum Business Group, PTT working on a Secondment as Chief Executive Officer and President Thai Oil Public Company Limited
Nov 30, 2018 - 2019	Director and Chairman of the Board, PTT LNG Company Limited
Oct, 2016 - 2019	Director, Sakari Resources Limited
Jun, 2017 - Oct, 2017	Chairman, PTT Global LNG Company Limited
Oct 1, 2016 - Aug 31, 2019	Chief Operating Officer, Upstream Petroleum and Gas Business Group, PTT Public Company Limited
2016 - 2017	Chairman, PTT Energy Resources Company Limited
Jan - Sep, 2016	Director, Thai Oil Public Company Limited
2015 - 2016	Director, The Joint Standing Committee on Commerce, Industry and Banking
2015 - 2016	Advisory Committee, Promoting and Supporting Office of Industries
2014 - 2015	The Federation of Thai Industries
2014 - 2015	Director, PTT International Trading Pte Ltd
May 1, 2014 - Sep 30, 2016	Director, Bangchak Petroleum Public Company Limited
2012 - 2015	Chief Financial Officer, PTT Public Company Limited
Nov, 2011 - Apr 30, 2014	Director, Star Petroleum Refining Public Company Limited (SPRC)
	Executive Vice President - Corporate Finance, PTT Public Company Limited

SHAREHOLDING IN GPSC (INCLUDING SPOUSE AND MINOR)

- None

QUALIFIED ACCORDING TO RELATED LAWS AND DOES NOT HAVE PROHIBITED QUALIFICATIONS

- Qualified

FAMILY RELATION WITH OTHER DIRECTORS, EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC AND ITS SUBSIDIARIES

- None

MR. KONGKRAPAN INTARAJANG

Director / Member of the Risk Management Committee
(Non - Executive Director)

DATE APPOINTED

April 1, 2019 (2nd Term)
August 15, 2017 (1st Term)

AGE: 52

EDUCATION

- Ph.D. Chemical Engineering, University of Houston, U.S.A.
- Bachelor of Engineering (Chemical Engineering)
(2nd Class Honor), Chulalongkorn University

TRAINING RECORD WITH**THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 119/2009)
- Role of the Chairman Program (RCP 21/2009)

OTHER TRAINING RECORD

- Breakthrough Program for Senior Executives,
IMD Business School
- Diploma, The National Defence College of Thailand,
Class 60 (NDC 60)
- The Executive Program in Energy Literacy for a Sustainable
Future, (TEA Class 14/2019), Thailand Energy Academy
- Leadership Development Program III (LDP III Class 4/2019),
PTT Leadership and Learning Institute (PTT PLLI)

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 3 Organizations

- Senior Executive Vice President reporting to Chief
Operating Officer, Downstream Petroleum Business Group,
PTT Public Company Limited
- Director and Secretary to the Board of Directors / Director to
the Risk Management Committee and Chief Executive Officer,
PTT Global Chemical Public Company Limited
- Director, Global Green Chemicals Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 5 Organizations

- Chairman, PTTGC America Corporation
- Chairman, PTTGC America LLC
- Director, PTTGC International Private Limited
- Co-Chairman, France - Thailand Business Forum
- Council of Trustees, The Petroleum Institute of Thailand (PTIT)

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Apr, 2017 - Jan 2, 2020	Director, Thai Tank Terminal Limited
Apr, 2017 - Sep, 2019	Chief Operation Officer - Upstream Petrochemical Business, PTT Global Chemical Public Company Limited
Jul, 2015 - Sep, 2019	Director and President & CEO, PTTGC America Corporation
Apr, 2015 - Sep, 2019	Director, PTTGC Innovation America Corporation
Feb, 2015 - Sep, 2019	Director, PTTGC International (Netherlands) B.V.
Nov, 2008 - Sep, 2019	Director, Emery Oleochemicals (M) Sdn. Bhd.
Nov, 2008 - Sep, 2019	Director, Emery Specialty Chemicals Sdn. Bhd.
Apr, 2017 - Jun, 2018	Co - Chairman, Work Stream 1: Technology, Innovation & Investment Opportunities, Thai - UK Business Leadership Council

SHAREHOLDING IN GPSC**(INCLUDING SPOUSE AND MINOR)**

- None

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None



MR. BANDHIT THAMPRAJAMCHIT

Director / Member of the Corporate Governance Committee
(Non - Executive Director)

DATE APPOINTED

April 3, 2018 (1st Term)

AGE: 49

EDUCATION

- Master of Business Administration (Executive), Sasin Graduate Institute of Business Administration of Chulalongkorn University
- M.Sc. in Advanced Chemical Engineering (Distinction), Imperial College, University of London
- Bachelor of Engineering (Chemical Engineering) (First Class Honours), Chulalongkorn University

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP 187/2014)

OTHER TRAINING RECORD

- The Executive Program in Energy Literacy for a Sustainable Future (TEA Class 14), Thailand Energy Academy
- Leadership Development Program 3 (LDP 3), PTT Leadership and Learning Institute, PTT Public Company Limited
- Capital Market Academy Leader Program (CMA 27), Capital Market Academy, PTT Group Leadership Development Program 2 (with INSEAD), Thailand & Singapore
- Energy Literacy for a Sustainable Future, YTEA Class 2, Thailand Energy Academy
- TLCA Executive Development Program (EDP), Thailand
- Executive Development Program, Fiscal Policy Research Institute Foundation, Thailand
- NIDA-WHARTON Executive Development Program, Thailand & U.S.A.

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Senior Executive Vice President-Refinery and Petrochemical and also taking a position of Executive Vice President-Operation Excellence (Act.), Thai Oil Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 7 Organizations

- Chairman of Petroleum Refining Industry Club, The Federation of Thai Industries
- Director, Thai Paraxylene Company Limited
- Director, Thailoil Ethanol Company Limited
- Director, Thai Lube Base Public Company Limited
- Director, Thailoil Power Company Limited
- Director, Thailoil Energy Services Company Limited
- Director, Sapthip Company Limited

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Oct, 2018 - Present	Senior Executive Vice President - Refinery and Petrochemical and also taking a position of Executive Vice President - Operation Excellence (Act.), Thai Oil Public Company Limited
Jul, 2017 - Oct, 2018	Senior Executive Vice President - Refinery and Petrochemical and also taking a position of Executive Vice President - Manufacturing, Thai Oil Public Company Limited
Jan, 2017 - Jun, 2017	Acting Senior Executive Vice President - Refinery and Petrochemical and also taking a position of Executive Vice President - Manufacturing, Thai Oil Public Company Limited
Aug, 2016 - Dec, 2016	Executive Vice President - Manufacturing, Thai Oil Public Company Limited
Apr, 2016 - Jul, 2016	Executive Vice President - Manufacturing and also taking a position of Senior Vice President - Refinery, Thai Oil Public Company Limited
Oct, 2015 - Mar, 2016	Acting Executive Vice President - Manufacturing and also taking a position of Senior Vice President - Refinery, Thai Oil Public Company Limited
Feb, 2015 - Sep, 2015	Senior Vice President - Refinery, Thai Oil Public Company Limited
Jan, 2014 - Jan, 2015	Vice President - Refinery, Thai Oil Public Company Limited

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

- None

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MR. BOONCHAI CHUNHAWIKSIT

Director (Non - Executive Director)

DATE APPOINTEDOctober 1, 2019 (1st Term)**AGE:** 59**EDUCATION**

- Master of Business Administration, Thammasat University
- Bachelor's Degree in Electrical Engineering, King Mongkut's Institute of Technology (North Bangkok)

**TRAINING RECORD WITH
THAI INSTITUTE OF DIRECTORS (IOD)**

- Director Certification Program (DCP) Class 244/2017

OTHER TRAINING RECORD

- Certificate of Senior Executive Program (SEP), Sasun Graduate Institute of Business Administration of Chulalongkorn University

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Acting Senior Executive Vice President, Upstream Petrochemical Business, PTT Global Chemical Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 5 Organizations

- Chairman, GC Estate Company Limited
- Director, GC Glycol Company Limited
- Director, Thai Tank Terminal Limited
- Director, HMC Polymers Company Limited
- Director, GC Maintenance and Engineering Company Limited

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

Oct 1, 2019 - Present	Acting Senior Executive Vice President, Upstream Petrochemical Business, PTT Global Chemical Public Company Limited
Jan 1, 2017 - Sep 30, 2019	Senior Vice President, Group Performance Center - Olefins, PTT Global Chemical Public Company Limited
Oct 1, 2016 - Dec 31, 2016	Vice President - Group Performance Center - Olefins, PTT Global Chemical Public Company Limited
Oct 1, 2015 - Sep 30, 2016	Vice President, Olefins Plant II, PTT Global Chemical Public Company Limited
2015	Vice President, GPC Strategy & Business Development, PTT Global Chemical Public Company Limited

**SHAREHOLDING IN GPSC
(INCLUDING SPOUSE AND MINOR)**

- None

**QUALIFIED ACCORDING TO RELATED LAWS AND
DOES NOT HAVE PROHIBITED QUALIFICATIONS**

- Qualified

**FAMILY RELATION WITH OTHER DIRECTORS,
EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC
AND ITS SUBSIDIARIES**

- None

MR. CHAWALIT TIPPAWANICH

Director / Secretary to the Board / Member of the Risk Management Committee / President and Chief Executive Officer (Executive Director)

DATE APPOINTED

October 1, 2018 (1st Term)

AGE: 57

EDUCATION

- Master of Engineering in Industrial Engineering Management, Asian Institute of Technology
- Bachelor of Engineering in Electrical Engineering, King Mongkut's Institute of Technology Ladkrabang

TRAINING RECORD WITH THAI INSTITUTE OF DIRECTORS (IOD)

- Director Certification Program (DCP 152/2011)

OTHER TRAINING RECORD

- Company Management Program
- The Great Manager - Thailand Quality Award
- GE Energy Customer Executive Leadership Program (GE: PTT Executive Leadership) - GE Global Learning Crotonville Leadership Institute, U.S.A.
- Advance Management Program (AMP 187) - Harvard Business School, Executive Education, U.S.A.
- Leadership Development Program III (Batch 2), PTT Leadership and Learning Institute
- The Joint State - Private Sector Course (Batch 5), Police College
- Top Executives in the Energy Education Program (Batch 12), Thailand Energy Academy

CURRENT POSITION IN OTHER ORGANIZATIONS

Listed Company-The Stock Exchange of Thailand 1 Organization

- Senior Executive Vice President, PTT Public Company Limited

Other Organizations / Companies

(Not Listed in the Stock Exchange of Thailand) 9 Organizations

- Director, Xayaburi Power Company Limited
- Director, Ratchaburi Power Company Limited
- Director, Glow Energy Public Company Limited
- Director, Glow Co., Ltd.
- Director, Glow SPP 2 Co., Ltd.
- Director, Glow SPP 3 Co., Ltd.
- Director, Glow IPP 2 Holding Co., Ltd.
- Director, Glow SPP 11 Co., Ltd.
- Director, Glow IPP Co., Ltd.

WORKING EXPERIENCE (5 - YEAR PAST EXPERIENCE)

- | | |
|-------------|--|
| 2017 - 2018 | Executive Vice President, Downstream Business Group Alignment, PTT Plc. secondment in the position of Executive Vice President - Organization Effectiveness of Thailoil Plc. |
| 2015 - 2016 | Executive Vice President, Downstream Business Group Alignment, PTT Plc. secondment in the position of President of HMC Polymers Co., Ltd. |
| 2013 - 2015 | Executive Vice President, Business Development and Project Management, Petrochemicals and Refining Business Unit, PTT Plc. |

SHAREHOLDING IN GPSC (INCLUDING SPOUSE AND MINOR)

Self: 47,000 shares (0.001667%)

QUALIFIED ACCORDING TO RELATED LAWS AND DOES NOT HAVE PROHIBITED QUALIFICATIONS

- Qualified

FAMILY RELATION WITH OTHER DIRECTORS, EXECUTIVES, MAJOR SHAREHOLDERS OF GPSC AND ITS SUBSIDIARIES

- None

EXECUTIVE TEAM



01
Mr. Chawalit Tippawanich
President and Chief Executive Officer

02
Mr. Smornchai Khoonrak
Executive Vice President - Operations

03
Mrs. Rosaya Teinwan
Executive Vice President - Business
Development and Corporate Strategy

04
Mrs. Wanida Boonpiraks
Executive Vice President - Corporate Finance
and Accounting

05
Mr. Sirimet Leepagorn
Executive Vice President - Asset Management

06
Ms. Attayar Sukotanang
Vice President, Corporate Internal Audit

07
Mr. Jaruwat Singsomdee
Vice President, Corporate Sustainability
Management

08
Ms. Dutdao Suksamran
Vice President, Legal

09
Ms. Pallapa Achanon
Company Secretary and Corporate
Governance and Affairs Department

10
Mrs. Sasitorn Stithit
Vice President, Human Resources and
Organization Effectiveness



11 _____
Mr. Kulapat Permbhusri
 Vice President, Investment and
 Subsidiary Management

12 _____
Mrs. Patrinee Suponthana
 Vice President, Corporate Accounting and Tax

13 _____
Mr. Surajit Bourtherng
 Vice President, Engineering and Maintenance

14 _____
Mr. Laksanapreecha Krutkuntode
 Vice President, Energy Disruptive Innovation

15 _____
Mr. Saochai Sookkasem
 Vice President, Plant Operations

16 _____
Mrs. Sirobon Boontaworn
 Vice President, Corporate Finance and
 Accounting

17 _____
Mr. Somsak Lertcharoensermuk
 Vice President, Project Construction
 Management

18 _____
Ms. Sukittee Chaiyarak
 Vice President, Corporate Finance and
 Strategy

19 _____
Mr. Pavarate Rattanasuwan
 Vice President, Business Development

20 _____
Mr. Ruengphong Ruenghiran
 Vice President, Asset Management /
 Managing Director, Nam Lik 1
 Power Company Limited, Lao PDR

Remark: The executives in numbers 1, 5, 12, and 18 are considered the first four executives as defined by the Securities and Exchange Commission.

MANAGEMENT STRUCTURE

As of December 31, 2019, the management structure of Global Power Synergy Public Company Limited (GPSC) comprises the Board of Directors; four Sub-Committees, namely the Corporate Governance Committee, the Risk Management Committee, the Nomination and Remuneration Committee, the Audit Committee, and the Executive Team, with the President and Chief Executive Officer as GPSC's highest-ranking executive.

the Nomination and Remuneration Committee, the Audit Committee, and the Executive Team, with the President and Chief Executive Officer as GPSC's highest-ranking executive.

GPSC ORGANIZATION STRUCTURE (DEPARTMENT LEVEL AND ABOVE)



BOARD OF DIRECTORS

COMPOSITION OF THE BOARD OF DIRECTORS

As of December 31, 2019, GPSC's Board of Directors consists of 13 directors, composed of 12 non-executive directors, five of whom are independent directors, one executive director, namely the President and Chief Executive Officer. The composition above is in line with GPSC's Articles of Association, which prescribe that the Board of Directors must comprise at least five but not exceeding 15 directors, no less than half of whom must reside in Thailand.

GPSC's Board of Directors consists of qualified directors who possess appropriate mix of skills, expertise, and experiences suitable for overseeing GPSC's business operation to the attainment of the objectives and goals of the company. The Board of Directors set the Board of Directors' Skill Matrix by classifying it to 12 subject matters under two categories:

- 1) Core Skills/Experience: Basic Expertise which is necessary for directorship position namely, policy development, business judgment, strategic planning, human resource and organization development, finance and accounting, internal audit, law, risk management and internal control, and corporate governance and corporate social responsibility.
- 2) Specific Skills/Experience: Expertise which is useful for the directors to govern GPSC, namely, power industry expertise, International Business, and innovation management.

Composition of the Board of Directors

As of December 31, 2019

13	5	12	1	Male 11	Female 2
Directors in the Board	Independent Directors	Non-Executive Directors	Executive Director		

		SKILL / EXPERTISE											
NAME - SURNAME	SEPO'S DIRECTOR POOL	CORE SKILLS								SPECIFIC SKILLS			
		Policy Development	Business Judgement	Strategic Planning	Finance & Accounting	Internal Audit	Law	Corporate Governance & CSR	Risk Management & Internal Control	HR & Organization Development	Power Industry Expertise	International Business	Innovation Management
1 Mr. Pailin Chuchottaworn	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 Mr. Kurujit Nakornthap	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
3 Mr. Payungsak Chartsutipol	✓	✓	✓	✓		✓		✓	✓	✓	✓		✓
4 Maj.Gen. Chaowalek Chayansupap		✓	✓	✓		✓		✓		✓	✓		
5 Mrs. Nicha Hiranburana Thuvatham		✓		✓				✓	✓	✓			
6 Mr. Wittawat Svasti - Xuto		✓	✓	✓					✓	✓	✓	✓	✓
7 Mr. Wuttikorn Stithit		✓	✓	✓	✓				✓	✓	✓		
8 Ms. Peangpanor Boonklum		✓	✓	✓		✓	✓	✓				✓	
9 Mr. Wirat Uanarumit		✓	✓	✓	✓				✓			✓	
10 Mr. Kongkrapan Intarajang		✓	✓	✓	✓			✓	✓	✓		✓	✓
11 Mr. Bandhit Thamprajamchit		✓	✓	✓				✓	✓	✓	✓		✓
12 Mr. Boonchai Chunhawiksit		✓	✓	✓							✓		
13 Mr. Chawalit Tippawanich		✓	✓	✓					✓	✓	✓		✓
TOTAL	3	13	12	13	4	5	3	8	10	10	9	6	6

BOARD OF DIRECTORS

As of December 31, 2019, the Board of Directors comprises 13 directors as follows.

NO.	NAME - SURNAME	POSITION	DATE APPOINTED
1	Mr. Pailin Chuchottaworn ⁽¹⁾	Independent Director	September 1, 2019
		Chairman of the Board	September 18, 2019
2	Mr. Kurujit Nakornthap ⁽²⁾	Independent Director	April 3, 2017
		Chairman of the Corporate Governance Committee	April 27, 2017
		Chairman of the Audit Committee	September 1, 2019
3	Mr. Payungsak Chartsutipol ⁽³⁾	Independent Director	April 3, 2018 (re - elected)
		Chairman of the Risk Management Committee	April 25, 2018
		Chairman of the Nomination and Remuneration Committee	December 1, 2019
4	Maj.Gen. Chaowalek Chayansupap ⁽⁴⁾	Independent Director	April 1, 2019 (re - elected)
		Member of the Nomination and Remuneration Committee / Member of the Audit Committee	April 24, 2019 (re - elected)
5	Mrs. Nicha Hiranburana Thuvatham ⁽⁵⁾	Independent Director	April 3, 2018
		Member of the Corporate Governance Committee	April 25, 2018
		Member of the Audit Committee	September 1, 2019
6	Mr. Boonchai Chunhawiksit ⁽⁶⁾	Director	October 1, 2019
7	Mr. Wittawat Svasti-Xuto ⁽⁷⁾	Director	April 1, 2019 (re-elected)
		Member of the Risk Management Committee	April 24, 2019 (re-elected)
		Member of the Nomination and Remuneration Committee	July 26, 2019
8	Mr. Wuttikorn Stithit ⁽⁸⁾	Director	April 1, 2019
9	Mr. Wirat Uanarumit ⁽⁹⁾	Director / Member of the Risk Management Committee	September 1, 2019
10	Mr. Kongkrapan Intarajang ⁽¹⁰⁾	Director	April 1, 2019 (re - elected)
		Member of the Risk Management Committee	April 24, 2019
11	Ms. Peangpanor Boonklum ⁽¹¹⁾	Director	April 3, 2017
		Member of the Corporate Governance Committee	April 27, 2017
12	Mr. Bandhit Thamprajamchit	Director	April 3, 2018
		Member of the Corporate Governance Committee	April 25, 2018
13	Mr. Chawalit Tippawanich	Director / Secretary to the Board / Member of the Risk Management Committee / President and Chief Executive Officer	October 1, 2018

Remark:

⁽¹⁾ Mr. Pailin Chuchottaworn was elected an independent director to replace Mrs. Suvimol Chrityakiern, a resigned director, in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of September 1, 2019; and was appointed Chairman of the Board in the Board of Directors Meeting No. 9/2019, convened on September 18, 2019, effective as of September 18, 2019.

⁽²⁾ Mr. Kurujit Nakornthap was appointed Chairman of the Audit Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019.

⁽³⁾ Mr. Payungsak Chartsutipol was appointed Chairman of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.

⁽⁴⁾ Maj.Gen. Chaowalek Chayansupap was re-elected as an independent director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019; was re-appointed as Member of the Nomination and Remuneration Committee, effective as of April 24, 2019; and was re-appointed as Member of the Audit Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019.

- ⁽⁵⁾ Mrs. Nicha Hiranburana Thuvatham was appointed Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of July 26, 2019; was appointed Member of the Audit Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019; and resigned as Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.
- ⁽⁶⁾ Mr. Boonchai Chunhawiksit was elected as a director to replace Mr. Supattanapong Punmeechaow, a resigned director, in the Board of Directors Meeting No. 9/2019, convened on September 18, 2019, effective as of October 1, 2019.
- ⁽⁷⁾ Mr. Wittawat Svasti-Xuto was re-elected as a director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019; was re-appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019; was appointed Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of July 26, 2019; and served as Member of the Nomination and Remuneration as Mr. Payungsak Chartsutipol had been appointed Chairman of the Nomination and Remuneration in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.
- ⁽⁸⁾ Mr. Wuttikorn Stithit was elected as a director to replace Mr. Surong Bulakul, whose term completed at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019.
- ⁽⁹⁾ Mr. Wirat Uanarumit was elected as a director to replace Mr. Atikom Terbsiri, a resigned director, in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of September 1, 2019, and was appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019.
- ⁽¹⁰⁾ Mr. Kongkrapan Intarajang was re-elected as a director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019 and was appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019.
- ⁽¹¹⁾ Ms. Peangpanor Boonklum resigned as a director and Member of the Corporate Governance Committee, effective as of January 1, 2020, and Mr. Atikom Terbsiri was appointed as a director and Member of the Corporate Governance Committee to replace Ms. Peangpanor Boonklum, a resigned director, in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of January 1, 2020.

DIRECTORS WHO RESIGNED AND COMPLETED THE TERM IN THE YEAR 2019

NO.	NAME - SURNAME	POSITION	DATE APPOINTED
1	Mr. Surong Bulakul	Director / Chairman of the Board	Completed the Term in the 2019 Annual General Meeting of Shareholders
2	Mrs. Suvimol Chrityakierne	Independent Director / Chairman of the Audit Committee	Resigned, Effective on September 1, 2019
3	Mr. Atikom Terbsiri	Director / Member of the Risk Management Committee	Resigned, Effective on September 1, 2019
4	Mr. Supattanapong Punmeechaow	Director	Resigned, Effective on October 1, 2019

AUTHORIZED DIRECTORS

The directors authorized to act on behalf of GPSC as stated in GPSC affidavit are "Mr. Chawalit Tippawanich, President and Chief Executive Officer (with his signature and the corporate seal affixed) or Mr. Boonchai Chunhawiksit, or Mr. Wira Uanarumit, or Mr. Wittawat Svasti-Xuto, or Mr. Kongkrapan Intarajang, Mr. Bandhit Thamprajamchit, or Mr. Wuttikorn Stithit (with signatures of any two and the corporate seal affixed)."

ROLES AND RESPONSIBILITIES OF THE BOARD OF DIRECTORS

The roles and responsibilities of the Board of Directors are to oversee GPSC's operation to ensure compliance with laws, regulations, resolutions of shareholders' meetings, and GPSC articles of association as well as strict adherence to corporate governance principles and the code of conduct for directors of listed companies to protect GPSC's and its shareholders' interest. The roles and responsibilities of the Board of Directors can be summarized as follows.

1. To devote themselves to the determination of GPSC's vision, mission, directions, and strategies by expressing their opinion fully and seeking relevant information useful for the prescription of GPSC's directions
2. To review and approve GPSC's key strategies, policies, objectives, action plans, and financial goals as well as regularly oversee and monitor the executives so that such plans are carried out in accordance with the prescribed directions and strategies and to ensure effective and efficient implementation of GPSC's vision, directions, and strategies
3. To define corporate governance policies and a code of conduct comprising appropriate guidelines and best practices for directors, executives, and employees to foster a sense of professional responsibility and understanding, which are to be complied with strictly in conjunction with the rules and regulations of GPSC to ensure equity to all stakeholders

4. To approve expenditures for investments, loaning or application for credits from financial institutions, lending, and being a guarantor as part of GPSC's regular operations without budget limits in accordance with the rules and regulations of GPSC and pertinent regulations and laws stipulated by the Stock Exchange Market of Thailand and the Securities and Exchange Commission
5. To consider potential risk factors, formulate comprehensive risk management guidelines, ensure that the executives operate with efficient risk management systems and processes in place, and predict possible risks that may arise from new business opportunities
6. To ensure sufficient and effective internal control as well as regular assessment of the suitability of GPSC's internal control systems
7. Monitor and remedy issues related to potential conflicts of interest and related transactions, prioritizing major transactions that will result in maximum benefits for shareholders and stakeholders
8. To consider and approve the appointment of qualified candidates with no prohibited characteristics under the Public Limited Companies Act B.E. 2535 (A.D. 1992) (including additional amendments) and the Securities and Exchange Act B.E. 2535 (A.D. 1992) (including additional amendments), as well as laws, notifications, regulations, and/or other relevant rules as new directors upon vacancies of directorships, either as a result of an expiration of term of office or for other reasons, and upon the rise of such necessity, as well as determine remuneration to propose at shareholders' meetings for approval
9. To determine and amend the list of authorized directors
10. To appoint the Audit Committee or any other sub-committees as well as define their roles and responsibilities to assist and support the Board of Directors in their operations
11. To implement an appropriate and transparent talent acquisition and selection system to fulfill key management positions
12. To appoint GPSC's executives with qualifications as defined by the Securities and Exchange Commission or the Capital Market Advisory Board, appoint Company Secretary, as well as determine the remuneration of the executives and Company Secretary
13. To put in place a remuneration determination system or mechanism for GPSC's top executives to ensure appropriateness and consistency with GPSC's performance to create short-term and long-term motivation
14. To conduct regular self-performance appraisals and the President and Chief Executive Officer's performance appraisals on a regular basis
15. To ensure reliable accounting systems, financial statements, and audit systems as well as an efficient and effective internal auditing system
16. To oversee the completion of GPSC's financial statements at the end of each accounting year and sign to approve such statements, to be proposed for approval at annual general meetings of shareholders
17. To consider and approve the selection and appointment of auditors as well as determine the appropriateness of the remuneration submitted by the Audit Committee before proposing it for approval at annual general meetings of shareholders
18. To attach significance to social and environmental responsibilities in GPSC's business operation for a better and sustainable quality of life in society
19. To assess GPSC's performance under its corporate governance policies and code of conduct at least once a year
20. To provide each shareholder group with appropriate communication channels and oversee that information disclosure is complete, clear, transparent, reliable, and of highest standards
21. To encourage GPSC's directors and executives to attend courses and seminars hosted by the Thai Institute of Directors (IOD), especially those relevant to their roles and responsibilities
22. To convene internal meetings between non-executive directors and independent directors as called for by necessity or when deemed appropriate to discuss various management issues of current interest without the presence of the management and submit the summary of such meetings to the President and Chief Executive Officer
23. Formulate policies and perform supervisory roles to ensure that GPSC has an efficient anti-corruption system in place so as to ensure that the executives recognize the significance of anti-corruption practices, place emphasis on them, and cultivate them into the organizational culture of the company
24. Comply with anti-corruption measures, with penalties imposed for non-compliance

The Board of Directors may authorize and/or designate individuals to perform specific tasks on its behalf. The appointment of attorneys or sub-attorneys shall conform to the scope defined in the letter of authorization and/or in compliance with the rules, regulations, or orders prescribed by the Board of Directors and/or GPSC. The authorization of the roles and responsibilities of the Board of Directors shall not be in such a manner that enables the Board of Directors or the appointed attorneys, through the attorneys or sub-attorneys, to approve transactions that may benefit themselves or others who may have conflict of interest (as defined in the notifications of the Securities and Exchange Commission or the Capital Market Supervisory Board) in any manner or create conflicts of interest with GPSC or GPSC's subsidiaries, except transactions that are in accordance with the policies and criteria approved by shareholders' meetings or approved by the Board of Directors.

In addition, the operations of the Board of Directors that require approval from shareholders' meetings are as follows.

- Cases in which GPSC or GPSC's subsidiaries, as defined by the laws on securities and exchange, enter into a related transaction, or acquire, or sell major assets of GPSC in accordance with the classification of the laws on securities and exchange, in which GPSC shall comply with the prescribed criteria and processes
- Selling or transferring GPSC's business, either in its entirety or partially, to another party
- The drawing up, amendment, or revocation of contracts related to a full or partial lease of GPSC's business, the appointment of a proxy to act on behalf of GPSC, or the merging of the business with another party with the aim to share profits
- Amendment of the memorandum of association or the articles of association
- Increasing or decreasing GPSC's authorized capital
- Company dissolution or merge with another company
- Debenture issuance

ROLES AND RESPONSIBILITIES OF THE CHAIRMAN

1. To supervise and monitor the performance of the Board of Directors to ensure efficiency in fulfilling the objectives and main goals of GPSC and compliance with laws, corporate governance principles, and the roles and responsibilities of the Board of the Directors of GPSC
2. To determine the agenda of the Board of Directors' meetings, taking into account recommendations of the President and Chief Executive Officer, and ensure that vital agenda items are included
3. To convene the Board of Directors' meetings and deliver meeting notices to the directors in no less than seven days prior to the meetings so as to allow sufficient time for directors to consider information necessary for decision-making (The board meetings can be convened either by the Chairman of the Board of Directors or any individual assigned by the Chairman)
4. To preside over the Board of Directors' meetings, ensure efficiency of the meetings and sufficient allocated time for the presentations and discussion required for all agenda items, encourage careful consideration and free expression of opinions, guide the meetings towards resolutions, and conclude the meetings
5. To preside over annual general meetings of shareholders to keep them in line with laws, regulations of GPSC, and the prescribed agenda and allocate sufficient time for presentations and shareholders' inquiries

6. To oversee and encourage directors to adhere to corporate governance principles and contribute to an organizational culture characterized by ethical principles and corporate governance
7. Foster a cordial relationship between the Board of Directors and the management team

THE BOARD OF DIRECTORS' MEETING

According to the corporate governance practice, the Board of Directors designates dates of meetings in advance each year to enable the directors to allocate their time for the meetings. The Board of Directors' Meeting (additional meeting) for considering urgent matters may be arranged if required. Directors who have unexpected engagement and are unable to attend a meeting must submit a written leave of absence letter to the Chairman. Meeting invitation notice and documents will be submitted to directors at least seven days prior to each meeting to provide the directors with adequate time to review the agendas before the meeting, except urgent matters that require the calling of urgent meetings. If more information is needed, the directors can inform the Company Secretary to respond to the queries in advance.

In addition, the directors who have conflict of interest with each agenda must not take part in the decision-making process of such agenda.

After the meeting, the minutes of meeting will be prepared for the Board of Directors' approval in the next meeting. The Chairman will sign the approved minutes of meeting and it will be systematically kept for further use.

In 2019, GPSC held total 16 Board of Directors Meetings: 12 ordinary meetings and 4 additional meeting to consider special-agendas, one Non-Executive Directors Meeting, and one Independent Directors Meeting. More importantly, GPSC has set up Protocols for Meetings of the Board of Directors to obtain a clear procedure, encompassing processes prior to, during, and after each meeting, to ensure their efficiency.



MEETING ATTENDANCE OF GPSC DIRECTORS IN 2019

NAME - SURNAME	POSITION	BOARD OF DIRECTORS	BOARD OF DIRECTORS (ADDITIONAL MEETING)	AUDIT COMMITTEE (AC)	NOMINATION AND REMUNERATION COMMITTEE (NRC)	CORPORATE GOVERNANCE COMMITTEE (CGC)	RISK MANAGEMENT COMMITTEE (RMC)	RISK MANAGEMENT COMMITTEE (RMC) (ADDITIONAL MEETING)	NON-EXECUTIVE DIRECTORS	1 MEETINGS	1 MEETINGS	2 MEETINGS
1	Mr. Pailin Chuchottaworn ⁽¹⁾	Independent Director / Chairman of the Board	4/4	1/1					N/A	1/1		N/A
2	Mr. Kurujit Nakornthap ⁽²⁾	Independent Director / Chairman CGC / Chairman AC	11/12	4/4	5/5	4/4			1/1	1/1		2/2
3	Mr. Payungsak Chatsutipoj ⁽³⁾	Independent Director / Chairman RMC / Chairman NRC	12/12	4/4	2/2		7/7	1/1	1/1	1/1		2/2
4	Maj.Gen. Chaowalek Chayansupap ⁽⁴⁾	Independent Director / NRC Member / AC Member	12/12	4/4	7/7	10/10			1/1	1/1		2/2
5	Mrs. Nicha Hiranburana Thuvatham ⁽⁵⁾	Independent Director / CGC Member / AC Member	11/12	4/4	2/2	3/4	3/4		1/1	1/1		2/2
6	Mr. Boonchai Chunhawiksit ⁽⁶⁾	Directors	3/3	1/1					N/A			N/A
7	Mr. Wittawat Svasti-Xuto ⁽⁷⁾	Directors / RMC Member / NRC Member	11/12	2/4		10/10	6/6	1/1	1/1			2/2
8	Mr. Wuttikorn Stithit ⁽⁸⁾	Directors	6/9	1/1					1/1			1/1
9	Mr. Wirat Unarumit ⁽⁹⁾	Directors / RMC Member	4/4	1/1			3/3		N/A			N/A
10	Mr. Kongkrapan Intarajang ⁽¹⁰⁾	Directors / RMC Member	12/12	4/4			3/4	1/1	1/1			2/2
11	Ms. Peanganor Boonklum ⁽¹¹⁾	Directors / CGC Member	10/12	3/4		4/4			1/1			2/2
12	Mr. Bandhit Thamprajamchit	Directors / CGC Member	12/12	4/4		4/4			1/1			2/2
13	Mr. Chawalit Tippawanich	Directors / Secretary to the Board / RMC Member / President and CEO	12/12	4/4			7/7	1/1				2/2

NAME - SURNAME		POSITION		BOARD OF DIRECTORS	BOARD OF DIRECTORS (ADDITIONAL MEETING)	AUDIT COMMITTEE (AC)	NOMINATION AND REMUNERATION COMMITTEE (NRC)	CORPORATE GOVERNANCE COMMITTEE (CGC)	RISK MANAGEMENT COMMITTEE (RMC)	RISK MANAGEMENT COMMITTEE (RMC) (ADDITIONAL MEETING)	NON-EXECUTIVE DIRECTORS	INDEPENDENT DIRECTORS	SHAREHOLDERS MEETING
				12 MEETINGS	4 MEETINGS	7 MEETINGS	10 MEETINGS	4 MEETINGS	7 MEETINGS	1 MEETINGS	1 MEETINGS	1 MEETINGS	2 MEETINGS
DIRECTORS WHO RESIGNED / COMPLETED THE TERM IN 2019													
1	Mr. Surong Bulakul ⁽¹²⁾	Directors / Chairman of the Board	3/3	2/2									1/1
2	Mrs. Suvimol Chrityakierne ⁽¹³⁾	Independent Director / AC Chairman	8/8	2/3	5/5						1/1		2/2
3	Mr. Atikom Terbsir ⁽¹⁴⁾	Directors / RMC Member	8/8	3/3					4/4	1/1	1/1		2/2
4	Mr. Supattananopong Punmeechaow ⁽¹⁵⁾	Directors	8/9	3/3					2/2		1/1		2/2

Remark: N/A means not attended since the Director resigned or was appointed during the year 2018.

GPSC held two meeting of shareholders in 2018; namely the Annual General Meeting of Shareholders (AGM) in April 3, 2018, and the Extraordinary General Meeting of Shareholders No. 1/2018, held in August 24, 2018.

⁽¹⁾ Mr. Pallin Chuchottaworn was elected an independent director to replace Mrs. Suvimol Chrityakierne, a resigned director, in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of September 1, 2019; and was appointed Chairman of the Board in the Board of Directors Meeting No. 9/2019, convened on September 18, 2019, effective as of September 18, 2019.

⁽²⁾ Mr. Kurujit Nakornthap was appointed Chairman of the Audit Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019.

⁽³⁾ Mr. Payungsak Chartsulipol was appointed Chairman of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.

⁽⁴⁾ Maj.Gen. Chaowalek Chayansupap was re-elected as an independent director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019; was re-appointed as Member of the Nomination and Remuneration Committee, effective as of April 24, 2019; and was re-appointed as Member of the Audit Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019.

⁽⁵⁾ Mrs. Nicha Hiranburana Thuvatham was appointed Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of July 26, 2019; was appointed Member of the Audit Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019; and resigned as Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.

⁽⁶⁾ Mr. Boonchai Chunhawitsit was elected as a director to replace Mr. Supattananapong Punmeechaow, a resigned director, in the Board of Directors Meeting No. 9/2019, convened on September 18, 2019, effective as of October 1, 2019.

⁽⁷⁾ Mr. Wittawat Svasti-Xuto was re-elected as a director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019; was re-appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019; was appointed Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of July 26, 2019; and served as Member of the Nomination and Remuneration as Mr. Payungsak Chartsulipol had been appointed Chairman of the Nomination and Remuneration in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.

⁽⁸⁾ Mr. Wuttikorn Sitthit was elected as a director to replace Mr. Surong Bulakul, whose term completed at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019.

⁽⁹⁾ Mr. Wirat Uanarumit was elected as a director to replace Mr. Atikom Terbsiri, a resigned director, in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of September 1, 2019, and was appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019.

⁽¹⁰⁾ Mr. Kongkrapan Intarajang was re-elected as a director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019 and was appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019.

⁽¹¹⁾ Ms. Peangpanor Boonklum resigned as a director and Member of the Corporate Governance Committee, effective as of January 1, 2020, and Mr. Atikom Terbsiri was appointed as a director and Member of the Corporate Governance Committee to replace Ms. Peangpanor Boonklum, a resigned director, in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of January 1, 2020.

⁽¹²⁾ Mr. Surong Bulakul completed his direction term at the 2019 AGM on April 1, 2019.

⁽¹³⁾ Mrs. Suvimol Chrityakierne's resignation was effective on September 1, 2019.

⁽¹⁴⁾ Mr. Atikom Terbsiri's resignation was effective on September 1, 2019.

⁽¹⁵⁾ Mr. Supattananapong Punmeechaow's resignation was effective on October 1, 2019.

EXECUTIVE TEAM

THE EXECUTIVES

As of December 31, 2019, GPSC has a total of 20 executives, as follows:

- 1) **Mr. Chawalit Tippawanich**
President and Chief Executive Officer
- 2) **Mr. Smornchai Khoonrak**
Executive Vice President - Operations
- 3) **Mrs. Rosaya Teinwan**
Executive Vice President - Business Development and Corporate Strategy Acting Vice President, Corporate Strategy and Planning
- 4) **Mr. Sirimet Leepagorn**
Executive Vice President - Asset Management
- 5) **Mrs. Wanida Boonpiraks**
Executive Vice President - Corporate Finance and Accounting
- 6) **Ms. Sukittee Chaiyarak**
Vice President, Corporate Finance and Strategy
- 7) **Mrs. Patrinee Suponthana**
Vice President, Corporate Accounting and Tax
- 8) **Mr. Kulapat Permbhusri**
Vice President, Investment and Subsidiary Management
- 9) **Mr. Jaruwat Singsomdee**
Vice President, Corporate Sustainability Management
- 10) **Ms. Dutdao Suksamran**
Vice President, Legal
- 11) **Mr. Pavarate Rattanasuwan**
Vice President, Business Development
- 12) **Mr. Ruengphong Ruenghiran**
Vice President, Asset Management
- 13) **Mr. Laksanapreecha Krutkuntode**
Vice President, Energy Disruptive Innovation
- 14) **Mrs. Sasitorn Siithit**
Vice President, Human Resources and Organization Effectiveness
- 15) **Mr. Somsak Lertcharoensermsuk**
Vice President, Project Construction Management
- 16) **Mr. Surajit Bourtherng**
Vice President, Engineering and Maintenance
- 17) **Mr. Saochai Sookkasem**
Vice President, Plant Operations
- 18) **Ms. Attayar Sukotang**
Vice President, Corporate Internal Audit
- 19) **Mrs. Sirobon Boontaworn**
Vice President, Corporate Finance and Accounting
- 20) **Ms. Pallapa Achanon**
Company Secretary and Corporate Governance and Affairs Department

The executives No. 1 - 7 are qualified as the first four executives, according to SEC's definition.

SCOPE OF AUTHORITY OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

The President and Chief Executive Officer has the authority and duties to manage business operations as assigned by the Board and to manage plans or budgets approved by the Board of Directors with stringency, honesty, and circumspection, while protecting the interest of GPSC and shareholders. The scope of authority of the President and Chief Executive Officer entails the following matters:

- 1) To manage GPSC's daily operations
- 2) To manage GPSC's plans and budgets approved by the Board of Directors
- 3) To prepare reports, plans, and financial statements and present them to the Board of Directors on a quarterly basis
- 4) To formulate GPSC's trade policies as well as enter into or terminate any contract related to the purchase and sale of raw materials and products on GPSC's behalf at present and in the future (within the period of not exceeding three years since the day the Chief Executive Officer is appointed and if the contract value does not exceed THB 100 million)
- 5) To enter into or terminate any contract or obligations other than specified in Item 4., with the contract value not exceeding THB 300 million
- 6) To employ, appoint, remove, transfer, promote, demote, decrease salary or payment, impose disciplinary sanctions on, or terminate employment of employees on behalf of GPSC; to appoint executives; as well as to delegate authority and responsibilities to suitable personnel

In addition, the Board of Directors has granted a power of attorney to the President and Chief Executive Officer, the scope of which is defined as follows.

- The authority to manage GPSC's business operations in accordance with objectives, rules, policies, regulations, orders, and resolutions reached at the Board of Director's meetings and/or shareholders' meetings.
- The authority to command, contact, order, and proceed as well as execute juristic acts, sign contracts, agreements, orders, announcements, and any other documents that are deemed necessary and appropriate in order to fulfill the assigned responsibilities.

- The authority to authorize and/or assign other individuals to act on his or her behalf to perform certain specific tasks. The appointment of a lawful attorney or assigning individuals must be conducted within the scope of authority indicated in that specific letter of authorization and/or in accordance with relevant rules, regulations, or orders issued by the Board of Director and/or GPSC.

However, the aforementioned scope of the President and Chief Executive Officer's authority shall not apply if the Chief Executive Officer is a stakeholder or has any conflict of interest with GPSC.

NOMINATION AND APPOINTMENT OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

For the nomination and appointment of the President and Chief Executive Officer in case of vacancy, the Nomination and Remuneration shall select candidates with suitable qualifications, namely expertise, work experience beneficial to GPSC, and leadership, to propose to the Board of Directors for approval and appointment.

THE MANAGEMENT COMMITTEE

GPSC has established GPSC Management Committee (GPSCMC) to ensure its management is systematic and swift as well as enables the company to achieve its goals efficiently and promotes robust connection and coordination between GPSC and the companies in which GPSC is a shareholder. The Management Committee consists of members, a secretary, and an advisor, as detailed below.

1. President and Chief Executive Officer	Chairman
2. Executive Vice President - Asset Management	Member
3. Executive Vice President - Business Development and Corporate Strategy	Member
4. Executive Vice President - Operations	Member
5. Executive Vice President - Corporate Finance and Accounting	Member
6. Vice President, Human Resources and Organization Effectiveness	Member
7. Vice President, Corporate Sustainability Management	Member
8. Vice President, Legal	Member
9. Company Secretary and Corporate Governance and Affairs Department	Member and Secretary
10. Vice President, Corporate Internal Audit	Advisor

Roles and Responsibilities of the Management Committee

GPSC Management Committee has the duties to offer consultancy and recommendations to the President and Chief Executive Officer in making significant decisions related to GPSC's strategies, directions, long-term plans, performance, investment plans, budgets, and resources allocation to GPSC and its subsidiaries. The committee is also entrusted with the duty to create uniform operation systems among the companies in which GPSC is a shareholder, which entails offering consultancy and recommendations as well as support operations in the following matters.

- 1) Defining the vision and missions of GPSC Group
- 2) Defining the strategic directions and goals of the business of GPSC Group as well as the overall performance of the business groups and GPSC Group
- 3) Reviewing GPSC Group's capital allocation structure
- 4) Reviewing GPSC Group's Portfolio Management
- 5) Reviewing and monitoring overseas business expansion of GPSC Group
- 6) Making policies and decisions regarding human resources management and ensuring the readiness and a systematic and efficient development of GPSC's executives above Level 10 to accommodate future missions of GPSC Group (Leadership Affiliation & Alignment Program)
- 7) Reviewing and offering recommendations on standards/mechanisms of the human resources system management, the data system management, and the organization structure of GPSC and GPSC Group to achieve sustainable organizational excellence
- 8) Reviewing and formulating policies and principles in accordance with PPT Way of Conduct as well as promoting practical results as outlined
- 9) Prioritizing human and financial resources allocation to GPSC and companies in which GPSC is a shareholder
- 10) Seeking resolutions to significant conflicts
- 11) Monitoring the progress and performance of GPSC Group in comparison to the PA & KPIs
- 12) Reviewing the risk management of GPSC Group
- 13) Reviewing the meeting agenda before presenting it to the Board of Directors
- 14) Prioritizing decisions of the Board of Directors for operational efficiency
- 15) Appointing working committees and/or working team to support the operation of GPSC Management Committee
- 16) Comply with anti - corruption measures as stated in GPSC's anti - corruption policy
- 17) Fulfilling other obligations assigned by the President and Chief Executive Officer

THE COMPANY SECRETARY

The Board of Directors' Meeting No. 7/2019, convened on July 26, 2019 resolved to appoint Ms. Pallapa Achanon as the Company Secretary, effective as of August 1, 2019, whose roles and responsibilities are as follows.

- 1) To prepare and maintain GPSC's documents, namely a registrar of directors, notices and minutes of the Board of Directors' meetings, notices and minutes of shareholders' meetings, and annual reports
- 2) To maintain reports on interest submitted by directors or executives
- 3) To arrange the Board of Directors' meetings and shareholder's meetings
- 4) To provide recommendations on relevant laws and regulations to the Board of Directors and executives
- 5) To organize trainings and orientations as well as provide current and new directors with information necessary to the fulfillment of their roles and responsibilities
- 6) To oversee and ensure complete compliance with laws, regulations, rules, and resolutions of the Board of the Directors' meeting and shareholders' meetings, as well as good corporate governance policies and code of business ethics
- 7) To carry out other operations in accordance with stipulations of the Capital Market Supervisory Board

Ms. Pallapa Achanon has education and Company Secretary training as follows:

- Master of Business Administration (Finance)
Kasetsart University
- Bachelor of Science (Business Administration)
Kasetsart University
- Fundamentals for Corporate Secretaries 1/62,
Thai Listed Companies Association
- Company Secretary Program (CSP) 99/2019,
Thai Institute of Directors
- Director Accreditation Program (DAP) 163/2019,
Thai Institute of Directors

DIRECTOR AND EXECUTIVE REMUNERATION

Director Remuneration

In 2019, the Board of Directors, by the recommendation of the Nomination and Remuneration Committee, has considered the remuneration of the Board of Directors and the Sub - Committees, by taking into account various relating factors e.g. the company's operating results, dividend payout to shareholders, the Board of Director's performance, responsibilities of the Board of Directors and the Sub - Committees, and comparison with other listed companies within the same industry and having similar size. The following remuneration scheme for the Board of Directors was proposed to and subsequently approved at the 2019 Annual General Meeting of Shareholders.

1) Retainer Fee for Directors

1.1 Monthly retainer fee (Same rate as 2018)

- Chairman 37,500 THB / month
- Directors 30,000 THB / month

1.2 Meeting allowance (only for the directors who attend the meeting) (additional proposal)

- Chairman 12,500 THB / meeting; paid for no more than 15 meetings per year
- Directors 10,000 THB / meeting; paid for no more than 15 meetings per year

2) Meeting allowance for Sub-Committee members (upward adjustment proposed)

comprising Audit Committee, Nomination and Remuneration Committee, Corporate Governance Committee, Risk Management Committee and others (if any) (only the directors who attend the meeting)

- Chairmen of Sub-Committees 25,000 THB / meeting; paid for no more than 15 meetings per year
- Members of Sub-Committees 20,000 THB / meeting; paid for no more than 15 meetings per year

The remuneration for the Chairman of the Board and Sub - Committees are 25 percent higher than directors and Sub - Committee members.

3) Annual Bonus

Annual bonus The 2019 AGM resolved to approve annual bonus for the directors, including those who completed their terms and/or retired during 2018, at the rate of 0.5 percent of the 2018 net profit but not exceeding THB 16 million. The bonus portion is calculated based on the term of each director. The Chairman of the Board shall receive an amount which is 25 percent higher than other directors.

4) Other Remuneration -None-

REMUNERATION OF GPSC DIRECTORS IN 2019

(Unit: Baht)

	NAME - SURNAME	POSITION	BOARD OF DIRECTORS		BOARD OF DIRECTORS		AUDIT COMMITTEE (AC)		NOMINATION AND REMUNERATION COMMITTEE (NRC)		CORPORATE GOVERNANCE COMMITTEE (CGC)		RISK MANAGEMENT COMMITTEE (RMC)		ANNUAL BONUS FOR 2018 PERFORMANCE ⁽¹⁶⁾	TOTAL
			RETAINER FEE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE		
1	Mr. Pailin Chuchottaworn ⁽¹⁾	Independent Director / Chairman of the Board	142,500.00	45,000.00	-	-	-	-	-	-	-	-	-	-	-	187,500.00
2	Mr. Kurujit Nakornthap ⁽²⁾	Independent Director / Chairman CGC / Chairman AC	360,000.00	90,000.00	110,000.00	117,500.00	97,500.00	-	1,236,960.55	-	1,236,960.55	-	1,236,960.55	-	1,236,960.55	2,011,960.55
3	Mr. Payungsak Chartsutipol ⁽³⁾	Independent Director / Chairman RMC / Chairman NRC	360,000.00	100,000.00	45,000.00	-	-	-	217,500.00	-	1,236,960.55	-	1,236,960.55	-	1,236,960.55	1,959,460.55
4	Maj.Gen. Chaowalek Chayansupap ⁽⁴⁾	Independent Director / NRC Member / AC Member	360,000.00	100,000.00	136,000.00	174,000.00	-	-	1,236,960.55	-	1,236,960.55	-	1,236,960.55	-	1,236,960.55	2,006,960.55
5	Mrs. Nicha Hiranburana Thuvatham ⁽⁵⁾	Independent Director / CGC Member / AC Member	360,000.00	100,000.00	40,000.00	40,000.00	-	-	921,789.78	-	921,789.78	-	921,789.78	-	921,789.78	1,501,789.78
6	Mr. Boonchai Chunhawiksit ⁽⁶⁾	Directors	90,000.00	30,000.00	-	-	-	-	-	-	-	-	-	-	-	120,000.00
7	Mr. Wittawat Svasti-Xuto ⁽⁷⁾	Directors / RMC Member / NRC Member	360,000.00	80,000.00	-	189,000.00	-	-	1,148,949.03	-	1,148,949.03	-	1,148,949.03	-	1,148,949.03	1,148,949.03
8	Mr. Wuttikorn Stithit ⁽⁸⁾	Directors	270,000.00	70,000.00	-	-	-	-	-	-	-	-	-	-	-	340,000.00
9	Mr. Wirat Unarumit ⁽⁹⁾	Directors / RMC Member	120,000.00	40,000.00	-	-	-	-	60,000.00	-	220,000.00	-	220,000.00	-	-	220,000.00
10	Mr. Kongkrapan Intarajang ⁽¹⁰⁾	Directors / RMC Member	360,000.00	100,000.00	-	-	-	-	80,000.00	-	1,776,960.55	-	1,776,960.55	-	1,776,960.55	1,776,960.55
11	Ms. Peangpanor Boonklum ⁽¹¹⁾	Directors / CGC Member	360,000.00	90,000.00	-	-	-	-	78,000.00	-	1,764,960.55	-	1,764,960.55	-	1,764,960.55	1,764,960.55
12	Mr. Bandhit Thamprajanchit	Directors / CGC Member	360,000.00	100,000.00	-	-	-	-	921,789.78	-	921,789.78	-	921,789.78	-	921,789.78	1,459,789.78
13	Mr. Chawalit Tippawanich	Directors / Secretary to the Board / RMC Member / President and CEO	360,000.00	100,000.00	-	-	-	-	192,000.00	-	963,781.84	-	963,781.84	-	963,781.84	963,781.84

NAME - SURNAME	POSITION	BOARD OF DIRECTORS		BOARD OF DIRECTORS		AUDIT COMMITTEE (AC)		NOMINATION AND REMUNERATION COMMITTEE (NRC)		CORPORATE GOVERNANCE COMMITTEE (CGC)		RISK MANAGEMENT COMMITTEE (RMC)		ANNUAL BONUS FOR 2018 PERFORMANCE ⁽¹⁶⁾	TOTAL
		RETAINER FEE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE	MEETING ALLOWANCE						
DIRECTORS WHO RESIGNED / COMPLETED THE TERM IN 2019															
14 Mr. Surong Bulakul ⁽¹²⁾	Directors / Chairman of the Board	113,750.00	-	-	-	-	-	-	-	-	-	-	-	1,546,200.69	1,659,950.69
15 Mrs. Suvimol Chrityakierne ⁽¹³⁾	Independent Director / AC Chairman	240,000.00	60,000.00	111,000.00	-	-	-	-	-	-	-	18,000.00	921,789.78	1,350,789.78	
16 Mr. Atikom Terbsiri ⁽¹⁴⁾	Directors / RMC Member	240,000.00	60,000.00	-	-	-	-	-	-	-	-	150,000.00	1,236,960.55	1,686,960.55	
17 Mr. Supattanasong Punmeechaow ⁽¹⁵⁾	Directors	315,000.00	72,500.00	-	-	-	-	-	-	-	-	90,000.00	1,236,960.55	1,714,460.55	
DIRECTOR WHO RESIGNED IN 2018 (RECEIVE ANNUAL BONUS FROM 2018 PERFORMANCE)															
18 Ms. Panada Kanokwat	Independent Director / Member of the CGC (Completed the Term in AMG 2018)	-	-	-	-	-	-	-	-	-	-	-	315,170.77	315,170.77	
19 Mr. Somchai Wongwattanasan	Director / Member of the CGC (Completed the Term in AMG 2018)	-	-	-	-	-	-	-	-	-	-	-	315,170.77	315,170.77	
20 Mr. Chansin Treenuchagron	Director / Member of the NRC / Member of the RMC (Resigned, effective from August 31, 2018)	-	-	-	-	-	-	-	-	-	-	-	820,121.79	820,121.79	
21 Mr. Toemchai Bunnag	Director / Secretary to the Board / Member of the RMC / President and CEO (Resigned, effective from September 28, 2018)	-	-	-	-	-	-	-	-	-	-	-	915,011.91	915,011.91	
TOTAL		4,771,250.00	1,237,500.00	442,000.00	520,500.00	293,500.00	975,000.00	15,999,999.99	24,239,749.99						

Remark:

- ⁽¹⁾ Mr. Pailin Chuchottaworn was elected an independent director to replace Mrs. Suvimol Chrityakierne, a resigned director, in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of September 1, 2019; and was appointed Chairman of the Board in the Board of Directors Meeting No. 9/2019, convened on September 18, 2019, effective as of September 18, 2019.
- ⁽²⁾ Mr. Kurujit Nakomthap was appointed Chairman of the Audit Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019.
- ⁽³⁾ Mr. Payungsak Chartsutipol was appointed Chairman of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.
- ⁽⁴⁾ Maj.Gen. Chaowalek Chayansupap was re-elected as an independent director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019; was re-appointed as Member of the Nomination and Remuneration Committee, effective as of April 24, 2019; and was re-appointed as Member of the Audit Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019.
- ⁽⁵⁾ Mrs. Nicha Hiranburana Thuvatham was appointed Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of July 26, 2019; was appointed Member of the Audit Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019; and resigned as Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.
- ⁽⁶⁾ Mr. Boonchai Chunhawiksit was elected as a director to replace Mr. Supattanapong Punmeechaow, a resigned director, in the Board of Directors Meeting No. 9/2019, convened on September 18, 2019, effective as of October 1, 2019.
- ⁽⁷⁾ Mr. Wittawat Svasti-Xuto was re-elected as a director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019; was re-appointed Member of the Risk Management

Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019; was appointed Member of the Nomination and Remuneration Committee in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of July 26, 2019; and served as Member of the Nomination and Remuneration as Mr. Payungsak Chartsutipol had been appointed Chairman of the Nomination and Remuneration in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of December 1, 2019.

- ⁽⁸⁾ Mr. Wuttikorn Stithit was elected as a director to replace Mr. Surong Bulakul, whose term completed at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019.
- ⁽⁹⁾ Mr. Wirat Uanarumit was elected as a director to replace Mr. Atikom Terbsiri, a resigned director, in the Board of Directors Meeting No. 7/2019, convened on July 26, 2019, effective as of September 1, 2019, and was appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 8/2019, convened on August 14, 2019, effective as of September 1, 2019.
- ⁽¹⁰⁾ Mr. Kongkrapan Intarajang was re-elected as a director at the 2019 Annual General Meeting of Shareholders (AGM), convened on April 1, 2019, effective as of April 1, 2019 and was appointed Member of the Risk Management Committee in the Board of Directors Meeting No. 4/2019, convened on April 24, 2019, effective as of April 24, 2019.
- ⁽¹¹⁾ Ms. Peangpanor Boonklum resigned as a director and Member of the Corporate Governance Committee, effective as of January 1, 2020, and Mr. Atikom Terbsiri was appointed as a director and Member of the Corporate Governance Committee to replace Ms. Peangpanor Boonklum, a resigned director, in the Board of Directors Meeting No. 11/2019, convened on November 19, 2019, effective as of January, 2020.
- ⁽¹²⁾ Mr. Surong Bulakul completed her directorship term at the 2019 AGM on April 1, 2019.
- ⁽¹³⁾ Mrs. Suvimol Chrityakierne resignation was effective on September 1, 2019.
- ⁽¹⁴⁾ Mr. Atikom Terbsiri resignation was effective on September 1, 2019.
- ⁽¹⁵⁾ Mr. Supattanapong Punmeechaow resignation was effective on October 1, 2019.
- ⁽¹⁶⁾ The 2018 annual bonus was approved in the 2019 Annual General Meeting of Shareholders which was paid to the directors on April 30, 2019.

Executive Remuneration

The remuneration of executive officers of all levels is considered in accordance with Key Performance Indicators (KPIs), jointly defined by the Board of Directors, the President and Chief Executive Officer, and top executives, comprising Stakeholder Perspective, Internal Process Perspective, and Learning & Growth Perspective. The KPIs also cover the annual corporate performance (short-term) as well as the assessment of leadership qualities, which will ensure that executive officers can lead the company towards its goals as defined by its strategies in the long term. Each executive is assigned their own specific KPIs that correspond with their roles and responsibilities. Each year, the Board of Directors considers a salary adjustment for the President and Chief Executive Officer, and the President and Chief Executive Officer considers a salary adjustments for top executives based on their performance. All such salary adjustments shall be conducted in accordance with the criteria prescribed by GPSC.

2019**Monetary Remuneration**

- Monetary remuneration for the executives who are not directors is as follows:

Number of persons

20

Remuneration

71,591,100

THB

Other Remuneration

- Other monetary remuneration such as provident funds and others is as follows:

Number of persons

20

Remuneration

45,226,370

THB

 Chairman
 Director
 Highest-Ranking Executive
 Executive
 Holding Company

[illegible]

COMPANY		SUBSIDIARY										ASSOCIATE		JOINT VENTURE				LONG - TERM INVESTMENT CAPITAL							
NAME - SURNAME	GLOBAL POWER SYNERGY PLC.	COMBINED HEAT AND POWER PRODUCING CO., LTD.	NATEE SYNERGY CO., LTD.	IRPC CLEAN POWER CO., LTD.	ICHINOSEKI SOLAR POWER 1 GK	GPSC INTERNATIONAL HOLDINGS LIMITED	GLOBAL RENEWABLE POWER CO., LTD.	ENERGY RECOVERY UNIT CO., LTD.	GPSC HOLDING (THAILAND) CO., LTD.	BANG PA-IN COGENERATION CO., LTD.	XAYABURI POWER CO., LTD.	NAYA NAKORN ELECTRICITY GENERATING CO., LTD.	NAM LIK 1 POWER CO., LTD.	THAI SOLAR RENEWABLE CO., LTD.	SIAM SOLAR ENERGY 1 CO., LTD.	RPCL	BSA	SSA	24M	SPSE	RATCHABURI POWER CO., LTD.	BUSINESS SERVICES ALLIANCE CO., LTD.	SPORT SERVICES ALLIANCE CO., LTD.	24M TECHNOLOGIES, INC.	SARN PALANG SOCIAL ENTERPRISE CO., LTD.
		CHPP	NSC	IRPC-CP	ISP1	GPSCIH	GRP	ERU	GPSC HOLDING	BIC	XPCL	NNEG	NLIPC	TSR	SSE1										
21 Ms. Pallapa Achanon	<div></div>																								<div></div>
22 Mr. Jaruwat Singsoomdee	<div></div>		<div></div>											<div></div>	<div></div>	<div></div>									
23 Mrs. Sukittee Chaiyarak	<div></div>		<div></div>			<div></div>			<div></div>																
24 Mr. Somsak Lertcharoensermusuk	<div></div>											<div></div>													
25 Mr. Laksanapreecha Krutkuntode	<div></div>						<div></div>																		
26 Mr. Reungpong Reunghirun	<div></div>												<div></div> <div></div>												
27 Mr. Kowit Chuengsatiansup												Consultant													
28 Mr. Surong Bulakul																								<div></div>	
29 Mr. Norkun Sithiphong											<div></div>														
30 Mr. Chansak Chuenchom		<div></div>																							

Chairman Director Highest-Ranking Executive Executive Holding Company

NAME - SURNAME		COMPANY																
		GLOBAL POWER PLC.	GLOW ENERGY PLC.	GLOW CO., LTD.	GLOW SPP 2 CO., LTD.	GLOW SPP 3 CO., LTD.	GLOW SPP 11 CO., LTD.	GLOW IPP CO., LTD.	GLOW IPP 2 HOLDING CO., LTD.	HHTC	HHPC	ENGIE MYANMAR COMPANY LIMITED	GHECO-ONE CO., LTD.	GLOW IPP 3 CO., LTD.	EASTERN SEABOARD CLEAN ENERGY CO., LTD.	RAYONG CLEAN ENERGY CO., LTD.	GLOW HEMARAJ	CHONBURI CLEAN ENERGY CO., LTD.
		GPSC	GLOW ENERGY	GLOW	GLOW SPP2	GLOW SPP3	GLOW SPP11	GLOW IPP	GLOW IPP2	HHTC	HHPC	ENGIE MYANMAR COMPANY LIMITED	GHECO-ONE CO., LTD.	GLOW IPP 3 CO., LTD.	EASTERN SEABOARD CLEAN ENERGY CO., LTD.	RAYONG CLEAN ENERGY CO., LTD.	GLOW HEMARAJ	CHONBURI CLEAN ENERGY CO., LTD.
1	Mr. Pailin Chuchottaworn																	
2	Mr. Kurujit Nakornthap																	
3	Mr. Payungsak Chartsutipol	●	●	●	●	●	●	●	●									
4	Maj.Gen. Chaowalek Chayansupap		●															
5	Mrs. Nicha Hiranburana Thuvatham																	
6	Mr. Wittawat Svasti-Xuto																	
7	Mr. Wuttikorn Stithit																	
8	Ms. Peangpanor Boonklum																	
9	Mr. Wirat Unanarumit																	
10	Mr. Kongkrapan Intarajang																	
11	Mr. Bandhit Thamprajamchit																	
12	Mr. Boonchai Chunhawikit																	
13	Mr. Chawalit Tippawanich	● ●	●	●	●	●	●	●	●									
14	Mr. Smornchai Khoonrak	●		●	●	●	●	●	●				●					
15	Mrs. Rosaya Teinwan	●		●	●	●	●	●	●									
16	Mr. Sirimet Leepagorn	●	●	●	●	●	●	●	●				●					
17	Mrs. Wanida Boonpiraks	●		●	●	●	●	●	●									
18	Mr. Kulapat Permbhusri	●													●	●	●	●
19	Ms. Dutdao Suksamran	●													●			
20	Mrs. Sukittee Chaiyarak	●													●			
21	Mrs. Sirobon Boontaworn	●	●							●	●			●	●	●	●	●
22	Mr. Kowit Chuengsatiansup										●							
23	Mr. Chulaporn Termthongchai																	



CORPORATE GOVERNANCE

GOOD CORPORATE GOVERNANCE POLICY AND CODE OF BUSINESS CONDUCT

Global Power Synergy Public Company Limited (GPSC) has operated in adherence to principles of good corporate governance and code of business conduct to ensure that in its advancement towards success and business growth, its business is still characterized by good governance, transparency, and responsibility towards each stakeholder group.

The Board of Directors has prescribed the good corporate governance policy to guide GPSC's personnel at all levels in their operation as follows.

GOOD CORPORATE GOVERNANCE POLICY

As corporate governance ensures that the executives and employees operate with transparency and accountability, the Good Corporate Governance Policy has been formulated as guidance for the Board of the Directors, executives, and employees in carrying out their duties, as detailed below.

1. To uphold good corporate governance, the Board of Directors, executives, and employees of GPSC shall adhere to the six following principles in fulfilling their duties:



- **Accountability** Responsibility towards one's decisions and actions and the ability to provide explanations for such decisions
- **Responsibility** Responsibility towards fulfilling one's duties with competency and efficiency
- **Equitable Treatment** of stakeholders treating stakeholders equally with fairness and reasons
- **Transparency** Openness and accountability in business operations and information disclosure
- **Vision to Create Long Term Value** Vision for the creation of long - term added value for GPSC
- **Ethics** Integrity and ethical principles in business operations

2. The Board of Directors shall fulfill its duties with dedication, responsibility, and independence and shall clearly separate the roles and responsibilities between the Chairman of the Board and the President and Chief Executive Officer.
3. The Board of Directors shall play a significant role in determining GPSC's vision, strategies, policies, and key plans while taking into consideration risk factors and preparing appropriate management of such risks and ensure the reliability of the accounting system, financial statements, and the auditing.
4. The Board of Directors shall serve as a role model of integrity and adherence to GPSC's good corporate governance policy as well as oversee the management of conflicts of interest and connected transactions.
5. The Board of Directors may appoint Sub-Committees as deemed appropriate to review significant matters.
6. The Board of Directors shall perform self-assessment on an annual basis to serve as a framework for examining the performance of the Board of the Directors.
7. The Board of Directors and executives shall define GPSC's code of business conduct to be adopted as guidelines by the Board of Directors, executives, and employees at all levels in tandem with GPSC's rules and regulations.
8. The Board of Directors shall oversee sufficient, reliable, and timely disclosure of information on financial and non-financial matters so as to ensure equal access to GPSC's information among shareholders and stakeholders as well as put in place public relations and investor relations divisions to be responsible for information disclosure for investors and the general public.
9. GPSC's shareholders shall receive equitable treatment, have access to IT information, and be able to communicate with GPSC through appropriate channels.
10. The Board of Directors shall oversee an appropriate, transparent, and fair talent acquisition and selection system to recruit personnel for executive positions at all levels.
11. The Board of Directors shall implement an effective anti-corruption system to ensure that the management gives precedence to anti-corruption and adhere to anti-corruption measures.

In addition to the aforementioned policy, the Board of Directors has also defined five categories of good corporate governance principles, comprising rights of shareholders, equitable treatment of shareholders, role of stakeholders, disclosure and transparency, and responsibilities of the Board of Directors.

CODE OF BUSINESS CONDUCT

The Board of Directors has formulated GPSC's code of business conduct, describing standards of behavior and conduct that GPSC's personnel at all levels should adopt in carrying out business operations and performing their duties. In 2019, the code of business conduct has been improved, real -life situations and case studies are added to set clearer guidelines for GPSC's personnel. GPSC's code of business conduct comprises 15 categories as follows.

01



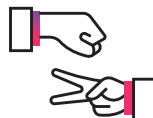
Compliance with Laws
and Human Rights

02



Political Rights and
Political Neutrality

03



Conflict of
Interest

04



Confidentiality and
Use of Inside
Information

05



Treatment of Customers
and Consumers

06



Treatment of
Business
Competitors

07



Procurement and
Treatment of
Business Partners

08



Communities, Social,
and Environmental
Responsibility

09



Treatment of
Employees

10



Treatment of
Creditors

11



Internal Control
and Internal Audit

12



Receiving and
Offering of Gifts and
Other Benefits

13



Safety, Health,
and Environment

14



Intellectual Properties
and Use of ICT

15



Political
Support

The details and guidelines of the principles of good corporate governance and GPSC's code of business conduct are available in the Corporate Governance and Code of Conduct Manual 2016 which is publicized on GPSC's website, accessible to the general public. In 2019, the Board of Directors approved the

Revised Corporate Governance and Code of Conduct Manual, which has been communicated to executives and employees and will be published on GPSC's website and made accessible to stakeholders and the general public by 2020.

GOOD CORPORATE GOVERNANCE IN ACTION

RIGHTS OF SHAREHOLDERS AND EQUITABLE TREATMENT OF SHAREHOLDERS

GPSC has treated every shareholder with respect and equity. The summary of its operations in 2019 is as follows.

1. The 2019 Annual General Meeting of Shareholders

The 2019 Annual General Meeting of Shareholders (AGM) was held on April 1, 2019 at Bangkok Convention Center, 5th Floor, Central Plaza Ladphrao. GPSC provided the shareholders convenience in attending the AGM as follows:

Pre - Meeting

- GPSC shareholder(s), which can be either one shareholder or combined shareholders, holding not less than one percent of the total voting rights of GPSC, were invited to propose agenda items and nominate director candidates from October 1 to December 31, 2018 (at least three months prior to the date of the AGM). The selection criteria and processes were published on GPSC's website
- The resolutions of the Board of the Directors on the AGM date and agenda items as well as the record date to determine the shareholders entitled to attend and vote in the AGM and receive the dividend were published through the SET's Digital Disclosure System as soon as the resolutions were reached on February 11, 2019.
- The invitation notice, both in Thai and English, meeting documents, and proxy forms were made available on GPSC's website on February 28, 2019 (30 days prior to the AGM) and delivered to shareholders via post on March 8, 2019 (21 days prior to the AGM) to allow sufficient time for shareholders to study the information for the AGM. Foreign shareholders were given the English version of the documents.
- Shareholders unable to attend the meeting were invited to appoint a proxy or grant proxy to independent directors to attend the meeting and vote in their lieu. Proxy Form B. (in which shareholders could cast their votes) is encouraged and was enclosed with the invitation notice sent via post to every shareholder.
- Shareholders were invited to submit inquiries about AGM attendance and the agenda prior to the meeting. The channels for inquiries were disclosed in the invitation notice.
- For institutional investors, GPSC contacted their representatives to provide information for institutional investors on the preparation of accurate and complete documents prior to the meeting.

Meeting

- The AGM was held at Bangkok Convention Center, 5th Floor, Central Plaza Ladprao, which was accessible via various public transport and spacious enough to accommodate all attending shareholders.
- Sufficient staffers were stationed at the venue to welcome and assist shareholders with the registration and document examination. In addition, revenue stamps were prepared to ensure convenience for proxies during the document examination process.
- An IT System (Shareholder Meeting System) was employed for registration, vote counting, and result displaying processes. The technology expedited the meeting as well as ensured accuracy.
- The rules and regulations of the meeting as well as the voting procedure were announced prior to the meeting commenced.
- Voting tickets were employed for every agenda item. For director election, the shareholders were eligible to vote each director separately.
- Independent legal counselors and shareholder representatives were invited to witness the vote counting. After the meeting was concluded, no dispute over the vote counting was lodged.
- The Chairman of the meeting encouraged and invited inquiries and free expression of opinions of shareholders as well as oversaw that all inquiries were addressed.
- The meeting was conducted in accordance with the agenda detailed in the invitation notice, and no agenda item was added.

Post - Meeting

- The resolutions of the AGM were published through the SET's Digital Disclosure System, along with the results and the numbers of votes (approval, disapproval, and abstention) for each resolution.
- The minutes, which identified the list of directors and top executives attending the meeting, the information presented by the directors, inquiries and answers, and the voting result of the shareholders for each resolution, were submitted to SET and published on GPSC's website within 14 days from the date of the AGM.

2. Conflicts of Interest by Director and Executives

GPSC has stipulated that its directors and executives shall declare any vested interest of their own and their related persons so that the Board of Directors may consider transactions potentially involving conflicts of interest and make decisions in the interest of GPSC. Any directors and executives with conflicts of interest in such transactions of GPSC shall take no part in any decision-making for those transactions. In 2016, the Board of Directors approved the implementation of the Report of Interest for directors, executives, and related persons (revised version) and the criteria of interest reporting which comprises first report, report in changes of interest, and yearly report.

3. Shareholders' Site Visit

To foster good relations with shareholders, GPSC held the 2019 annual site visit on December 12, 2019. A total of 96 shareholders, selected by lot from a pool of 807 applicants, were invited to visit GHECO - One plant in Rayong, where they were welcomed by the company's executive team, informed about the overall business of the company and the power plant, and given a close-up tour of the power plant. In addition, the shareholders also went on an excursion to the strawberry greenhouse at Princess Maha Chakri Sirindhorn Herbal Garden in Rayong—a project under the supervision of PTT Public Company Limited.

ROLES OF STAKEHOLDERS

GPSC has attached utmost significance to the roles of stakeholders, from shareholders, investors, customers, associated government agencies and other relevant agencies, employees, business partners, suppliers, contractors, as well as society and communities. To this end, GPSC has defined its policy on the roles of stakeholders in its corporate governance manual and code of business conduct and published its operations relevant to its stakeholders in GPSC's 2019 Sustainability Report.



1. Anti-Corruption

In 2019, GPSC reviewed and revised its anti-corruption policy; guidelines on accepting/giving gifts, receptions, and other benefits; and whistleblowing and whistleblower protection policy to ensure they encompassed all aspects of anti-fraud and corruption efforts and complied with amended laws relevant to the company. The revisions made were as follows:

Anti-Fraud and Corruption Policy

- **Definition**
Added to the policy was the word "fraud," defined as an act performed to enrich oneself or another by an unlawful means, including asset misappropriation, financial statement fraud, and corruption. As GPSC also has overseas businesses, it was also proposed that the definition of "corruption" be expanded to include: giving, offering, promising to offer or accepting or requesting bribery of money, assets, or other inappropriate benefits to/from foreign governmental officers and/or officers of an international organization. The purpose was to prevent GPSC personnel from engaging in an act that could constitute bribery.
- **Forms of Corruption**
GPSC had previously defined activities that could pose risks of fraud and corruption, such as the provision of political contributions, charitable donations, sponsorships, gifts, hospitality, and other expenses. To cover all current forms of corruption, making payments for goods and covering other expenses for another individual were added to this list.
- **Scope of the Policy**
GPSC revised the scope of enforcement, extending it to representatives of juristic persons; employees representing GPSC's subsidiaries or invested companies; or any individual acting for or on behalf of juristic persons, whether authorized or not, in addition to GPSC personnel.
- **Anti-fraud and Corruption Guidelines in 2019**
GPSC shall not tolerate any form of fraud or corruption, either direct or indirect, and has prescribed that GPSC personnel actively adhere to the company's anti-fraud and corruption policy, as detailed below.

1. GPSC personnel must not accept or offer gifts, assets, or other benefits to another GPSC employee or an external party except for business purposes and in compliance with local customs only, in which case the gift must be in an appropriate price range and does not significantly influence any decision-making.
2. GPSC personnel must maintain impartiality and must not offer political contributions, as stipulated in GPSC Business Code of Conduct. They must not support or perform any act that supports a political party, either directly or indirectly, nor use the company's resources to organize activities that undermine the company's political neutrality and/or cause damage to the company through involvement.
3. Corruption risk assessment and internal control must be regularly maintained to ensure effectiveness and suitability for corruption prevention. Risks in corruption-prone operations must be reviewed and assessed at least once per year.
4. The company must put in place inspection processes for systems and procedures for sales, marketing, procurement, and contract making as well as prescribe guidelines for the assessment of anti-corruption policy compliance.
5. Transparent and accurate financial reporting mechanisms of international accounting standards must be put in place.
6. The company must prescribe an archiving procedure to ensure that documents and records are readily available for inspection in verifying the accuracy and appropriateness of financial statements and that there is no unreported, unaccountable, or false item.
7. Any charitable donation or sponsorship granted by the company must be inspected, approved, and reviewed, with clear documentation in line with the company's regulations to ensure that the donation and sponsorship is a pretext for corruption.
8. The company's human resources management must reflect its commitment to anti-corruption measures. The company must also educate its employees on the anti-corruption policy and relevant practices as well as provide continuous communication and training to foster a clear understanding of the anti-corruption policy and practices as well as disciplinary actions for non-compliance.
9. The company must communicate its anti-corruption policy and practices to its subsidiaries, joint ventures, companies where it has a controlling interest, suppliers, stakeholders, and the general public via various channels such as the company's website and annual reports.
10. The company must provide communication channels for its personnel to submit reports, suggestions, and complaints related corruption as well as protect whistle-blower protection measures in accordance with its whistleblowing and complaints handling policy.
11. The company must comply with relevant anti-corruption laws of Thailand and other countries where it conducts business.
12. The management is responsible for reporting the implementation results of anti-corruption measures to the Corporate Governance Committee and the Board of Directors on a regular basis, at least once per year.
13. Relevant internal control units can promptly report detected issues to the Audit Committee as well as President and Chief Executive Officer, to be subsequently reported to the Board of Directors.

GPSC has also provided whistleblowing channels for GPSC personnel and external parties, which are detailed in the whistleblowing and whistleblower protection policy.

Anti-Corruption in Action in 2019

- GPSC prescribe its proper internal control measure for actions against bribing government agency's officers, according to the announcement of the National Anti-Corruption Commission.
- GPSC continued to pursue its anti-fraud and corruption measures as a certified member of the Collective Action Coalition of Thailand's Private Sector Collective Action Coalition against Corruption (CAC) in preparation for its recertification in 2021.
- GPSC announces its No-Gift Policy, along with related messages from the President and Chief Executive Officer to its business partners on its website www.gpscgroup.com
- GPSC required the directors, executives, and employees to compile annual conflict of interest reports.
- GPSC participated in a National Anti-corruption Day talk session entitled "Join Forces Against Corruption" on September 6, 2019.
- GPSC participates the International Anti-Corruption Day: Zero Tolerance of Corruption on December 9, 2019
- Anti-fraud and corruption training sessions and communications



In 2019, GPSC hosted training sessions and communicated with different stakeholder groups, including the directors, employees, executives, representatives of subsidiaries, suppliers, and other external parties, about its anti-fraud and corruption policy; guidelines on accepting/giving gifts, receptions, and other benefits; and whistleblowing and whistleblower protection policy, as detailed below.

- Executives and Employees

GPSC held orientation sessions for its new employees to communicate to them and foster an understanding about the company's principles of good corporate governance, code of business conduct, and anti-fraud and corruption policy.

On August 29, 2019, GPSC communicated its anti-fraud and corruption measures to GPSC personnel through an activity entitled QSHE & KM Day 2019, which featured activities that tested the understanding of the executives and employees about the company's code of business conduct.

- Suppliers

On November 14, 2019, GPSC communicated its anti-fraud and corruption measures to its supplier in GPSC Annual Supplier Seminar 2019, stressing the roles and responsibilities of GPSC personnel and suppliers in mutual upholding governance in their operation.

- Companies in PTT Group / Subsidiaries

On September 11, 2019, GPSC and PTT Group organized PTT Group CG Day 2019 under the theme "Digitization: CHALLENGE The GOVERNANCE," in which relevant government agencies and the suppliers of each subsidiary were invited to witness PTT Group's commitment to corporate governance.

2. Whistleblowing

In 2019, GPSC reviewed and revised its complaint handling and investigation procedure to better correspond with the revised organizational structure and ensure greater promptness. The revised procedure, which is scheduled to be enacted in 2020, is detailed below.

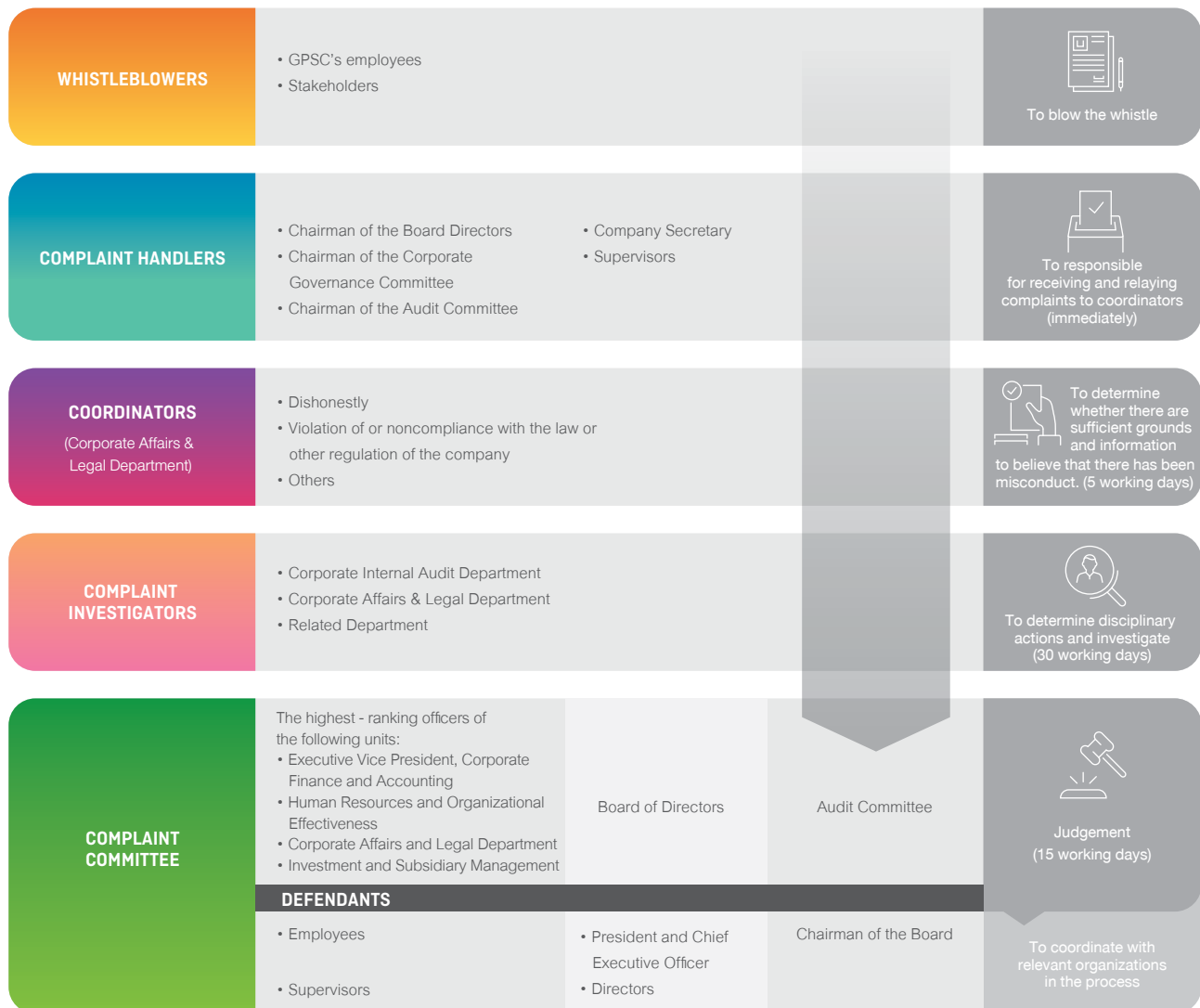
Whistleblowing and Whistleblower Protection

All stakeholders can report or provide information on cases of fraud, violation of laws, or non-compliance with the company's regulations, through the following channels.

Complaints Channels

- Mail Address:
Address: Global Power Synergy Public Company Limited
555/2 Energy Complex Building B, 5th Floor,
Vibhavadi - Rangsit Road, Chatuchak Sub-district,
Chatuchak District, Bangkok 10900
- E-mail Address: compliance_cg@gpscgroup.com
- Website: <http://www.gpscgroup.com/th/cg/whistle-blowing>
- In person: Compliance Division
- Telephone: 0 2140 4600, contact Compliance Division.

WHISTLEBLOWING'S PROCEDURES



Remark: The total of Whistleblowing's procedure is 50 working days. The processing period may be extended by no more than 30 days if deemed appropriate by the Complaint Committee.

Protection of Whistleblowers and Related Parties

- Whistleblowers will receive appropriate protection from, for example, changes in job descriptions or work locations, employment suspension, threats, disturbance, employment termination, or other acts that are unusual or unfair to them. Such protection is determined on a case - by - case basis.
- Any individual apprised of a complaint or other information related to a complaint as stipulated in this policy shall keep the complaint and all related information confidential and shall not disclose it to another party to ensure the safety of the whistleblower, information sources, or related parties them and protect them from potential harm.

Unless the disclosure is required by the procedure of this policy or the law.

If any information is intentionally disclosed, GPSC will take disciplinary and/or legal actions against the perpetrator, determined on a case - by - case basis.

- If the whistleblower or those cooperating with the fact - finding process believe that they are not safe and may be affected, they may file a petition to the Audit Committee to determine appropriate protection measures.
- Those affected will receive remedies through an appropriate and fair method or process.

Penalties for Bad-faith Whistleblowers

1. Should there be sufficient evidence that the whistleblower has filed a complaint in bad faith, GPSC shall protect the reputation of the accused party as follows.
 - 1.1 If the whistleblower is an employee, an investigation will be carried out to determine disciplinary actions in accordance with the company's regulations on human resources management.
 - 1.2 If the whistleblower is an external party and if GPSC, its subsidiaries, its affiliates, or the accused party suffer damage, GPSC may consider taking legal actions.
2. Any individuals, either intentionally or by negligence, do not comply with this policy or harass, threaten, impose undue disciplinary actions on, or discriminate against the whistleblower or individuals involved in the complaint filing in accordance with this policy will be considered to have committed an offense and will be required to compensate the company or affected individuals as well as assume civil and criminal liabilities or bear any relevant legal consequences.

In 2019, GPSC received complaints related to the violation of GPSC's code of business conduct through its whistleblowing channels, and a total of four cases were found to have met the criteria and thus accepted. For each case, an investigation was conducted and disciplinary actions were taken on related parties in accordance with the company's whistleblowing and whistleblower protection policy.

DISCLOSURE AND TRANSPARENCY

1. Information Disclosure

GPSC disclosed its material information, comprising its financial and non-financial reports as required by SEC and SET, as well as other associated information such as the activities of the Board of Directors and the Sub-committees, policies on corporate governance and corporate social responsibility, and compliance with such policies. The Board of Directors placed emphasis on the accuracy and completeness of the financial statements, and the disclosed information were verified by independent auditors to ensure the statements were accurate, not misleading, and sufficient for investor decisions. In addition, GPSC also issued a Management Discussion and Analysis (MD & A) along side the quarterly financial statements so that investors are better informed and understood changes in GPSC's financial statements and performance in each quarter more thoroughly in comparison to having the financial statements alone.

2. Investor Relations

The company has attached utmost significance to disclosure of material information to investors as it recognizes that accurate and equal information is vital to investment decisions. As such, Investor Relations Division has been formed to serve as a disclosure center of material information, financial statements, and information disclosed to the SET. To this end, the company's management has pursued strategies that place emphasis on

sufficient, accurate, reliable, up-to-date, and fair information disclosure, in accordance with the criteria prescribed by SEC and SET. In addition, the company has organized Investor Relations activities to present the company's performance as well as activities aimed at fostering relations and creating an understanding of the company's operation among institutional and non-institutional investors, both domestic and overseas, to inform investment decisions, which will create an appropriate shareholder structure and ultimately lead to stability and liquidity of the prices of the company's securities.

In the previous year, the Investor Relations Division executed strategies to develop its information disclosure to investors and analysts by means of various documents such as the Management's Discussion and Analysis (MD & A), analyst presentations, and investor notes to ensure sufficient, complete, accurate, and ready-to-use information on the company's performance and financial positions for investors and analysts as well as to reflect accurate the prices of the company's securities. Other information of materiality is published on the company's website at www.gpscgroup.com both in Thai and English. Any investor with inquiries may contact the company via its website or contact Investor Relations Division Telephone Number +66 (0) 2140 4628, +66 (0) 2140 4630, +66 (0) 2140 4691, +66 (0) 2140 5318, +66 (0) 2140-4715, E-mail: ir@gpscgroup.com.

KEY ACTIVITIES IN 2019

ACTIVITY	FREQUENCY IN 2019
Roadshow in Thailand	13
Roadshow Aboard	8
Analyst Meeting	5
Company Visit / Conference Call	>15
Roadshow with SET / Other Institutions	5
Institutional Investors Site Visit	2
Shareholders Site Visit	1

RESPONSIBILITIES OF THE BOARD

1. Good Corporate Governance and Code of Business Conduct

On December 18, 2019, the Board of Directors approved the Revised Corporate Governance and Code of Conduct Manual, which is in compliance with current laws, namely the Public Limited Companies Act, B.E. 2535, the Securities and Exchange Act, B.E. 2535, and the Organic Act on Anti-corruption, B.E. 2561 (including amendments); as well as the principles of the United Nations Global Compact, the governance principles of the Organization for Economic Cooperation and Development (OECD), the Corporate Governance Code for Listed Companies 2017 issued by the Securities and Exchange Commission (SEC), as well as other internationally recognized standards.

This manual, which will be enacted and come into effect from 2020 onwards, will provide guidelines for employees at all levels to ensure that GPSC's operation is efficient and effective and that its management is characterized by development towards excellence, transparency, and accountability, all of which will assure all stakeholders that GPSC is a leading SET-listed public company whose business is guided by governance and strives towards sustainable growth.

2. Specification of Policies, Directions, Business Strategies, and Key Performance Indicators

- In 2019, the Board of Directors reviewed and specified the policies, directions, and business strategies of GPSC as well as reviewed GPSC's vision, mission, and goals.
- In 2019, the Board of Directors approved GPSC's Key Performance Indicators (KPIs) both financial aspects and non-financial aspects, in accordance with the Balanced Scorecard. The indicators included Financial Perspective (EBITDA and net profit), Stakeholder Perspective (Customers' satisfaction), Internal Process Perspective, and Learning & Growth Perspective (Employee Engagement and Employee Capability).

3. Orientation of New Directors

GPSC organized an orientation for new directors prior to their first Board of Directors' Meeting so as to inform them of GPSC's business policies and relevant information such as the nature of the business, business strategies, organizational structure, shareholding structure, operating results, good corporate governance, and the code of business conduct, as well as laws and regulations beneficial to their role as GPSC's directors.

4. Director Development

It is GPSC's policy to encourage its directors to continuously develop themselves to enhance their efficiency in fulfilling their duties. The trainings attended by GPSC's directors were as follows.

DIRECTORS' TRAINING RECORD WITH THAI INSTITUTE OF DIRECTORS (IOD)

NO.	NAME - SURNAME	DCP	DAP	RCP	ACP	AACP	RCL	RCC	OTHERS
1	Mr. Pailin Chuchottaworn	51/2004	24/2004						FND14/2004 ACEP4/2012
2	Mr. Kurujit Nakornthap		64/2007		32/2010			12/2011	R - CF2/2013 C - Conference 1/2014
3	Mr. Payungsak Chartsutipol		SCC/2004				3/2016		
4	Maj.Gen. Chaowalek Chayansupap	217/2016				24/2016			
5	Mrs. Nicha Hiranburana Thuvatham		164/2019						
6	Mr. Wittawat Svasti-Xuto	146/2011							FSD 12/2011
7	Mr. Wuttikorn Stithit	158/2012							
8	Ms. Peangpanor Boonklum	7/2001					18/2019		ACPG38/2017 BNCP 7/2019
9	Mr. Wirat Uanarumit	8/2001			38/2012				DCPU5/2015 ELP7/2017
10	Mr. Kongkrapan Intarajang	119/2009		21/2009					
11	Mr. Bandhit Thamprajamchit	187/2014							
12	Mr. Boonchai Chunhawiksit	244/2017							
13	Mr. Chawalit Tippawanich	152/2011							

DCP: Director Certification Program
 DAP: Director Accreditation Program
 RCP: Role of the Chairman Program
 ACP: Audit Committee Program
 AACP: Advanced Audit Committee Program
 ACEP: Anti-corruption for Executive Program
 R-CF: R-CF-Chairman Forum
 ACPG: Anti - Corruption: The Practical Guide

RCL: Risk Management Program for Corporate Leaders
 RCC: Role of Compensation Committee
 FSD: Financial Statements for Directors
 FND: Finance for Non-Finance Director
 C-Conference: Collective Action Against Corruption Conference
 DCPU: Director Certification Program Update
 BNCP: Board Nomination and Compensation Program
 ELF: Ethical Leadership Program

Additional Directors' Training Record in 2019

In 2019, the following directors received additional training as detailed below.

- Mrs. Nicha Hiranburana Thuvatham attended in the Director Accreditation Program (DAP 164/2019), organized by the Thai Institute of Directors.
- Ms. Peangpanor Boonklum attended the Risk Management Program for Corporate Leaders (RCL 18/2019) and the Board Nomination and Compensation Program (BNCP 7/2019), organized by the Thai Institute of Directors.
- Mr. Kongkrapan Intarajang attended the Top Executives in the Energy Education Program (Batch 14: TEA 14/2019), organized by the Thailand Energy Academy, and the Leadership Development Program III (Batch 4: LDP III/2019), organized by PTT Leadership and Learning Institute.
- Mr. Bandhit Thamprajamchit attended the Top Executives in the Energy Education Program (Batch 14: TEA 14/2019), organized by the Thailand Energy Academy, and the Leadership Development Program III (Batch 4: LDP III/2019), organized by PTT Leadership and Learning Institute.
- Mr. Wuttikorn Stithit, Mr. Pailin Chuchottaworn, and Mr. Boonchai Chunhawiksit attended an orientation for new directors.

SELF-ASSESSMENT OF THE BOARD OF DIRECTORS AND THE SUB - COMMITTEES OF 2019

Assessment Process and Criteria

In 2019, the Board of Directors, with recommendation from the Corporate Governance Committee approved assessment criteria and assessment forms which composed of the Board of Directors assessment form, Individual director assessment forms (self-assessment and assessment of other directors), Sub-committee assessment forms (the entire committee) for the four sub-committees, and Sub-committee assessment forms (individual member) for the Audit Committee

Assessment Scales

the percentages represent the assessment results as follows:

Over 85%	=	Excellent
Over 75%	=	Very Good
Over 65%	=	Satisfactory
Over 50%	=	Good Under
Below 50%	=	Poor

The Company Secretary team then distributed these assessment forms to the directors to complete and return to the company to analyze the results. Subsequently, the assessment results were reported to the Board of Directors' Meetings to inform future improvements.

Assessment Result

1. The Board of Directors assessment Comprises 5 topics which are
 - 1) Composition and qualification of the Board
 - 2) Policy of the Board
 - 3) Roles, duties, and responsibilities of the Board
 - 4) Meeting of the Board
 - 5) Self-development of the board
 - **Assessment result: "Excellent" (91.66%)**
2. Individual director assessment (self-assessment and assessment of other directors) Comprises 6 topics which are
 - 1) Accountability
 - 2) Responsibility
 - 3) Equitable treatment of stakeholders
 - 4) Transparency
 - 5) Vision to create long-term value
 - 6) Ethics
 - **Assessment result (self-assessment): "Excellent" (98.31%)**
 - **Assessment result (assessment of other directors): "Excellent" (98.36%)**
3. Sub-committees assessment
 - 3.1 Sub-committee assessment forms (the entire committee) for the four sub-committees comprises 3 topics which are
 - 1) Composition and qualification of the committee
 - 2) Meeting of the committee
 - 3) Roles, duties, and responsibilities of the committee
 - **Assessment result (Audit Committee): "Excellent" (99.00%)**
 - **Assessment result (Nomination and Remuneration Committee): "Excellent" (96.11%)**
 - **Assessment result (Corporate Governance Committee): "Excellent" (96.20%)**
 - **Assessment result (Risk Management Committee): "Excellent" (91.22%)**
 - 3.2 Sub-committee assessment forms (individual member) for the Audit Committee comprises 6 topics which are
 - 1) Business knowledge
 - 2) Expertise
 - 3) Roles, duties, and responsibilities
 - 4) Independence and fairness
 - 5) Understanding of duties and accountability
 - 6) Commitment to the roles
 - **Assessment result: "Excellent" (96.33%)**



PERFORMANCE ASSESSMENT AND REMUNERATION POLICY OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

In 2019, the Board of Directors prescribed a performance assessment of the President and Chief Executive Officer, with the criteria consisting of two main factors, namely the performance in relation to the Key Performance Indicators (KPIs), which included annual performance (short-term) and performance in pursuing the company's policies in the long term, and the managerial ability and leadership, which would contribute to the company's long-term sustainability. Informed by a careful review by the Nomination and Remuneration Committee, the Board of Directors conducted a performance assessment and determined the remuneration of the President and Chief Executive Officer using the aforementioned criteria in tandem with the self-assessment of the President and Chief Executive Officer.

SUCCESSION MANAGEMENT

GPSC has devised a succession planning system for key positions, in which a list of individuals with potential for executive positions is compiled before they are assessed for their capacity as executives on competency and personal attributes. Subsequently, the assessment results are utilized to

create Individual Development Plans (IDPs) so as to prepare these individuals for succession either by taking office left vacant by retirement or filling new positions created with future expansion of the business. The progress of succession planning is constantly being reported to the executives. In 2019, 20 executives were assessed and provided with IDPs, and more executives will be assessed in the near future.

POLICY ON HOLDING DIRECTORSHIP IN OTHER COMPANIES BY THE PRESIDENT AND CHIEF EXECUTIVE OFFICER

The Board of Directors has determined that the President and Chief Executive Officer may hold directorship in other companies in which GPSC is a shareholder in order to ensure the uniformity and efficiency of their operations. For listed companies, the President and Chief Executive Officer may hold directorship in no more than five companies listed on SET, in accordance with GPSC's good corporate governance guidelines. As for other companies, organizations, or juristic persons, the Board of Directors has approved in principle that GPSC's directors, the President and Chief Executive Officer, and other personnel may take office in another company, organization, or juristic person so that GPSC would have a systematic review procedure.

Guidelines for Office Holding in Other Companies, Organizations, and Juristic Persons

1. In case President and Chief Executive is appointed by a royal command or appointed by the Cabinet by legal authority to any office beyond his or her roles and responsibilities in GPSC, the President and Chief Executive Officer shall inform the Board of Directors on which he or she serves of such an appointment, either by a royal command or by the Cabinet.
2. In case President and Chief Executive is appointed by a governmental agency, a state enterprise, an independent organization, or a governmental educational institution as a director, subcommittee member, working team member, expert, advisor or to any office beyond his or her roles and responsibilities in GPSC, the President and Chief Executive Officer shall inform the Board of Directors to obtain acknowledgment and opinions prior to the appointment.
3. In case President and Chief Executive is taking office as a director, subcommittee member, working team member, expert, advisor or taking any office in a company or any other juristic person not defined in Item 2) and beyond his or her roles and responsibilities in GPSC, the President and Chief Executive Officer shall obtain the opinion of the Board of Directors on which he or she serves prior to accepting such an office.
4. For executives and employees who are not President and Chief Executive, in case specified in Items 1), 2), or 3), that individual shall inform the meeting of the Management Committee (MC) to obtain acknowledgment and approval on a case-by-case basis prior to accepting such an office.

THE SUB-COMMITTEES

THE AUDIT COMMITTEE

As of December 31, 2019 the Audit Committee comprises three members as follows.

NO.	NAME-SURNAME	POSITION
1	Mr. Kurujit Nakornthap	Chairman (Independent)
2	Mrs. Nicha Hiranburana Thuvatham	Member (Independent)
3	Maj.Gen. Chaowalek Chayansupap	Member (Independent)

The Audit Committee of Global Power Synergy Public Company Limited comprises three independent directors, who have expertise in engineering and energy businesses, laws, financial accounting, and management and are qualified to review the credibility of financial statements in accordance with the regulations of the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET). Ms. Attayar Sukotang, Vice President of Corporate Internal Audit, is serving as the Secretary to the Audit Committee.

Composition of the Audit Committee

The Audit Committee shall be composed of one Chairman and no fewer than two but no more than four members. Each member of the committee must be an independent director and possess qualifications related to independence as stipulated in notifications of Securities and Exchange Commission (SEC) regarding qualifications and scope of responsibilities of an audit committee. In addition, at least one member of the committee must possess expertise and experience in finance and accountancy so as to be able to review the reliability of financial statements.

Roles and Responsibilities of the Audit Committee

1. Consider the Audit Committee Charter to conform with the scope of responsibility and communication to the Board of Directors, then review the appropriate and correctness of the Charter at least once a year.
2. Complete and review financial reports:
 - 2.1 Review the process of financial audits, financial status, and essential evidence and facts in order to ensure that they are credibly, correctly, and sufficiently illustrating the financial statements of the company, and that the company complies with accounting standard and other relevant laws.
 - 2.2 Review, select, and nominate external auditors as well as propose their audit fees to ensure their independence; and propose their dismissal if they demonstrate inability to perform their duties, neglect of duty, or abuse of functions.

- 2.3 Promote the independence of external auditors, provide opinions on their suitability, and attend at least one meeting with external auditors per year without the management present.

3. Internal control:

- 3.1 Review to ensure that the internal control systems, internal audit systems, and risk management of the company are efficient and effective, as well as to regulate appropriately the conforming the standard of Internal Audit.
- 3.2 Guide and give any advice to management to improve processes and the working system effectively in order to reduce any risk factors and report the correctness of financial statements.
- 3.3 Advise the set-up policy of good governance, to ensure that the assessment of all the actions comply with good governance policy.
- 3.4 Review operational procedures and company management to ensure that the company has operated correctly by policies, compliance, requirements, announcements, work procedures, and relevant laws.
- 3.5 Review and suggest a process for complaints and the whistle blowing policy.

4. Internal audit:

- 4.1 Review to ensure that the internal audit system is appropriate and efficient, and that the internal audit department complies with the standard of internal audit, as well as considering the quantity of human resources, budgets, and the independence of the Internal Audit Department.
- 4.2 Set the scope of internal auditing and review auditing plan, as well as considering the approval of annual audit plans, and revising plans (if the internal audit department proposes this) including the examination of the report of audit activity.
- 4.3 Consider and assess the performance of the Chief of the Internal Audit Department.
- 4.4 Review and consider to appoint, transfer, and remove the Chief of the Internal Audit Department.
- 4.5 Review and approve the Internal Audit Charter.
- 4.6 Corporate understanding among the Audit Committee, the Management, the Internal Audit Department, and external auditor with the same direction, including the consideration of the scope of the external auditor's responsibilities that would support the internal audit and vice versa.

5. Compliance with the law and other relevant regulations:

- 5.1 Review compliance with the law on securities, the stock exchange of Thailand, the regulations of the stock exchange of Thailand, and other laws relevant to the business of the company.
- 5.2 Review the effect of related transactions or conflicts of interest or the possible corruption to the company that complies with the law and regulations of the Stock Exchange of Thailand in order to ensure that a transaction is reasonable and of the utmost benefit to the company.
- 5.3 Review the Audit Committee Charter at least once a year and propose it to the Board of Directors for approval.
- 5.4 The Audit Committee should conduct self - assessment, then report the result with problems or obstacles if the work was unsuccessful to the Board of Directors annually.

6. Reporting:

- 6.1 The Board of the Audit committee report must be exposed and published on the company's annual report signed by the chairman of the Audit Committee. The report is detailed as follows:
 - Committee's advice in the case of the utmost credibility and accuracy of company's financial status.
 - Committee's advice in the case of the effectiveness of the internal control system.
 - Committee's advice of the company's compliance with law on the policy of the Stock Exchange of Thailand, regulations of the stock exchange, and other relevant laws of company business.
 - Committee's advice in the case of the suitability of the Auditor's selection.
 - Committee's advice in the case of the possible incident of a conflict of interest.
 - The quantity of meeting arrangements and the frequency of Audit Committee's participation in meetings.
 - The comments of the Audit Committee regarding the compliance with the Audit Committee Charter.
 - The regulations that Shareholders and common investors should know according to The Board of Director's scope of responsibility.

7. Other duties:

- 7.1 Seek independent specialist experts in order to help review some issues continuously and most effectively to propose them to the Board of Directors for approval at the expense of the company. However, the process of employment should comply with the company's regulations. In addition, the Board of Directors is authorized to assign a team to support the Audit Committee's activities.
- 7.2 In the case that the Audit Committee has received a report from internal auditors about any unusual action against compliance, work procedures, policies, company announcements, company direction, a report to the management can be made in order to consider and take action by responsibility department.

In case that the Audit Committee has received a report from the internal auditors about any unusual items or actions with the possibility of a negative impact on company progression such as

- Conflicts of interest
- Corruption or unusual actions or significant defects of internal control system
- Law infraction or other regulations of the Securities Exchange of Thailand or other relevant laws that are related to company business

The Audit Committee must report matters to the Board of Directors immediately in order to rectify solutions deemed appropriate. If it is found that the Board of Directors and the Management will not response to the action within limited timeframe, one of the Audit Committee might report or give notice directly to the Securities of Thailand.

7.3 In the case that the Audit Committee has received notice from auditors that Committee, Management or persons who responsible for the company business have any unusual actions that offend (related to Securities and Exchange Act Section 281 / 2 space two, Section 305, Section 306, Section 308, Section 309, Section 310, Section 311, Section 312 or Section 313), it is the responsibility of the Audit Committee to examine and report superficial results to the Board of Directors, then notify SET and the external auditor within 30 days of the first day's notification from the external auditor.

7.4 The Audit Committee has other responsibilities with the consent which is assigned by the Board of Directors or shareholders or other relevant laws.

In the case that the audit committee's duties are changed, the Company shall report on a resolution to change its duties, and shall prepare a name list and scope of work of the audit committee according to such change in the form as prescribed by the Exchange. Such name list and scope of work must be submitted to Stock Exchange of Thailand within 3 (three) business days from the date on which the change is made in accordance with the procedures under Stock Exchange of Thailand's regulations relating to reporting via an electronic media.



THE NOMINATION AND REMUNERATION COMMITTEE

As of December 31, 2019 the Nomination and Remuneration Committee comprises three members as follows.

NO.	NAME - SURNAME	POSITION
1	Mr. Payungsak Chartsutipol	Chairman (Independent)
2	Maj.Gen. Chaowalek Chayansupap	Member (Independent)
3	Mr. Wittawat Svasit-Xuto	Member (Independent)

Ms. Pallapa Achanon, Company Secretary and Corporate Governance and Affairs Department, is serving as the Secretary to the Nomination and Remuneration Committee

Composition of the Nomination and Remuneration Committee

The Nomination and Remuneration Committee shall be composed of at least three members, one of whom shall be an independent director. The term of each member is equal to his or her directorship term, and a vacating member is eligible for re-election.

Roles and Responsibilities of the Nomination and Remuneration Committee

1. To select qualified candidates to be nominated as GPSC's directors and President and Chief Executive Officer as well as ensure that the selection criteria and processes are principled and transparent before proposing to the Board of Directors and/or shareholders' meetings for approval
2. To review remuneration policies and criteria for GPSC's directors and President and Chief Executive Officer to ensure fairness and reasonableness for subsequent proposal to the Board of Directors and/or shareholders' meetings for approval
3. To review and nominate qualified directors as sub-committee directors before proposing to the Board of Directors for appointment as deemed necessary
4. To provide recommendations on the remuneration structure and composition for GPSC's directors to the Board of Directors
5. To assess the performance of the President and Chief Executive Officer in order to provide recommendations to the Board of Directors of GPSC regarding the appropriate remuneration
6. To review the succession plan for President and Chief Executive Officer and the list of candidates qualified for the succession consideration
7. To report the performance of the Nomination and Remuneration Committee to the Board of Directors and compile reports of the Nomination and Remuneration Committee to be disclosed in GPSC's annual reports
8. To fulfill any other obligations assigned by the Board of Directors



CORPORATE GOVERNANCE COMMITTEE

As of December 31, 2019, the Corporate Governance Committee comprises four members as follows.

NO.	NAME - SURNAME	POSITION
1	Mr. Kurujit Nakornthap	Chairman (Independent)
2	Mrs. Nicha Hiranburana Thuvatham	Member (Independent)
3	Ms. Peangpanor Boonklum	Member
4	Mr. Bandhit Thamprajamchit	Member

Ms. Pallapa Achanon, Company Secretary and Corporate Governance and Affairs Department, is serving as the Secretary to the Corporate Governance Committee.

Composition of the Corporate Governance Committee

The Corporate Governance Committee shall be composed of at least three members, at least half of whom shall be independent directors. The term of each member is equal to his or her directorship term, and a vacating member is eligible for re-election.

Roles and Responsibilities of the Corporate Governance Committee

- To determine and propose policies regarding GPSC's code of conduct and business ethics in accordance with good corporate governance principles to propose to the Board of Directors for approval and implementation as part of GPSC's standard practices
- To formulate policies, promote internal assessment of corporate governance standards, and apply for assessment by recognized external organizations on a regular basis
- To offer recommendations on good corporate governance to the Board of Directors
- To oversee the operation of the directors and the management to ensure adherence to good corporate governance principles stipulated by regulators such as the Stock Exchange of Thailand (SET), the Securities and Exchange Commission (SEC), and other relevant organizations
- To review GPSC's corporate governance guidelines in comparison to universal practice on a regular basis and propose to the Board of the Director
- To formulate corporate governance policies for corporate governance working teams
- To formulate policies and guidelines regarding sustainability management and corporate social responsibility
- To monitor sustainability management operations and report results to the Board of Directors
- To establish guidelines for GPSC's anti-corruption operations
- To promote the organizational culture of good corporate governance among the executives and employees at all levels to create practical results in both GPSC and its subsidiaries
- To provide consultancy to the corporate governance working team when participating corporate governance rankings by external parties at least once every three years
- To review and offer recommendations on the assessment form and the results of the performance assessment of GPSC's directors for subsequent proposal to the Board of Directors
- Formulate compliance frameworks for anti-corruption related operations of GPSC
- Prescribe and review anti-corruption policy; offer recommendations and guidance; monitor and assess anti-corruption related operations
- To report the results of corporate governance assessment to the Board of Directors. Should a factor or situation that may significantly affect GPSC arise, the Corporate Governance Committee must report it to the Board of Directors for acknowledgment and consideration immediately
- To regularly reviews the Corporate Governance Committee Charter
- To appoint the Secretary to the Corporate Governance Committee as deem appropriate.
- To fulfill other obligations assigned by the Board of Directors

THE RISK MANAGEMENT COMMITTEE

As of December 31, 2019, the Risk Management Committee comprises five members as follows.

NO.	NAME - SURNAME	POSITION
1	Mr. Payungsak Chartsutipol	Chairman (Independent)
2	Mr. Wittawat Svasti-Xuto	Member
3	Mr. Kongkrapan Intarajang	Member
4	Mr. Wirat Uanarumit	Member
5	Mr. Chawalit Tippawanich	Member

Mrs. Wanida Boonpiraks, Executive Vice President, Corporate Finance and Accounting, is serving as the Secretary to the Risk Management Committee.

Composition of the Risk Management Committee

The Risk Management Committee shall be composed of at least three members, comprising both executive directors and independent directors. The term of each member is three years, and a vacating member is eligible for re-election.

Roles and Responsibilities of the Risk Management Committee

1. To determine and review risk management policies and frameworks relevant to the business of GPSC
2. To oversee and support risk management operations to ensure correspondence with GPSC's strategies and business goals as well as shifting situations
3. To provide recommendations for, monitor, and assess the Risk Management and Internal Control Committee (RMCC) (management level) for further implementation
4. To report results of risk management, offer opinions on potential risks, and offer recommendations on risk control and mitigation plans as well as the development of GPSC's risk management system to RMCC on a regular basis to ensure efficiency
5. To ensure that GPSC has risk management plans, systems, or procedures to minimize potential impact on the business of GPSC, as well as monitor and assess the implementation of the risk management framework across the organization to ensure that adequate risk management has been put in place
6. To oversee and promote risk management across all dimensions, including environmental, social, and governance risks (ESG risks), as well as the anti-corruption efforts of GPSC and all companies in GPSC Group
7. To support and develop risk management and related instruments at all levels across the organization as well as promote risk management as part of the organizational culture
8. To report risk management results to the Board of Directors. Should a factor or situation that may significantly affect GPSC arise, the Risk Management Committee must report it to the Board of Directors for acknowledgment and consideration immediately.
9. To convene at least one Risk Management Committee meeting per quarter
10. To fulfill any other obligations assigned by the Board of Directors

NOMINATION AND APPOINTMENT OF DIRECTORS AND THE HIGHEST RANKING EXECUTIVE

INDEPENDENT DIRECTORS

As of December 31, 2019, GPSC has a total of five independent directors, who maintain independence from the executive team and the company's major shareholders, in line with the criteria of the Securities and Exchange Commission, which stipulate that at least one third of the members of the Board of Directors, but no fewer than three, shall be independent directors. GPSC has adopted the definition of independent directors as set forth in the notification of the Capital Market Supervisory Board, as detailed below.

1. Not holding shares exceeding 0.5 percent of the total voting shares of the company, its parent company, subsidiaries, associates, major shareholder, or controlling person, including the shares held by the related persons of independent directors
 2. Not being or having been an executive director involved in the management of the business; employee; staff member; salaried consultant; or controlling person of the company, its parent company, subsidiaries, associates, same-level subsidiaries, major shareholders, or the company's controlling persons unless the foregoing status has ended for at least two years prior to the date of appointment. In this regard, such prohibited characteristics shall exclude the case where an independent director used to be a government official or consultant of a government agency which is a major shareholder or the controlling person of the company.
 3. Not being a person who is related by blood or legal registration as father, mother, spouse, sibling, and child, including spouse of child, other directors, executives, major shareholders, controlling person or person to be nominated as director, executive, or controlling person of the company or its subsidiaries
 4. Not having or having had a business relationship with the company, its parent company, subsidiaries, associates, major shareholder, or controlling person in a manner that may interfere with independent discretion nor being or having been a significant shareholder or the controlling person of any person having a business relationship with the company, its parent company, subsidiaries, associates, major shareholder, or controlling person, unless such foregoing relationships have ended for at least two years prior to the date of appointment
- The business relationship under Paragraph 1 shall include normal business transactions, rental, or lease of real estate; transactions related to assets or services; or granting or receipt of financial assistance through receiving or extending loan, guarantee; providing assets as collateral; and any other similar actions, which result in the company or the counterparty being subject to indebtedness payable to the other party in an amount starting from three percent of the net tangible assets of the company or twenty million baht or more, whichever is lower. The calculation of such indebtedness shall be in accordance with the method for calculating the value of related party transactions under the Notification of the Capital Market Supervisory Board Re: Rules on Execution of Related Party Transactions, *mutatis mutandis*. In any case, the consideration of such indebtedness shall include the indebtedness incurred during the period of one year to the date of establishing the business relationship with the related person.
5. Not being or having been an auditor of the applicant, its parent company, subsidiaries, associates, major shareholder, or controlling person, and not being a significant shareholder, controlling person, or partner of the audit firm which employs the auditor of the company, its parent company, subsidiaries, associates, major shareholder, or controlling person, unless the foregoing relationship has ended for no less than two years prior to the date of appointment
 6. Not being or having been a provider of professional services, including a legal advisor or financial advisor being paid with a service fee of more than two million baht per year by the company, its parent company, subsidiaries, associates, major shareholder, or controlling person, and not being a significant shareholder, controlling person, or partner of such provider of professional services, unless the foregoing relationship has ended for no less than two years prior to the date of appointment
 7. Not being a director who is appointed as the representative of directors of the company, major shareholder, or shareholder who is a connected person of a major shareholder
 8. Not undertaking any business of the same nature and in significant competition with the business of the company or its subsidiaries, or not being a significant partner in a partnership, or an executive director, employee, staff, advisor earning regular monthly salary, or holding more than one percent of the voting shares of another company that undertakes a business of the same nature and in significant competition with the business of the company or its subsidiaries
 9. Not having any other characteristics that result in the inability to express independent opinions

The business relationship under Paragraph 1 shall include normal business transactions, rental, or lease of real estate; transactions related to assets or services; or granting or receipt of financial assistance through receiving or extending loan, guarantee; providing assets as collateral;



GPSC's definition of independent directors is that set forth by the Capital Market Supervisory Board with respect to the shareholding proportion. That is, GPSC has prescribed that its independent directors may "hold shares not exceeding 0.5 percent of the total number of shares with the total voting shares of GPSC, its parent company, subsidiaries, associates, major shareholder, or controlling person, including shares held by related persons of independent directors." (The Capital Market Supervisory Board has stipulated this number at one percent.) GPSC has also limited the consecutive terms of service for independent directors to be no more than 9 years.

NOMINATION OF DIRECTORS AND THE HIGHEST-RANKING EXECUTIVE

1. Nomination, Appointment, and Retirement of Directors

Nomination of Directors

The Board of Directors has appointed the Nomination and Remuneration Committee to select and nominate qualified candidates for directorship. In this process, the Nomination and Remuneration Committee will take into consideration recommendations from major shareholders and free float as well as director's pools derived from reliable organizations, which provide a list of qualified persons in different fields, before reviewing the qualifications of the candidates in the following aspects:

- Being qualified and having none of the prohibited characteristics under the Public Company Limited Act, B.E. 2535 and do not have characteristics indicating a lack of appropriateness in respect of trustworthiness in managing business whose shares are held by public shareholders as specified in the notification of the SEC
- Not over 70 years of age
- Knowledgeable, capable and possess a variety of skills and working experiences that are in line with GPSC's strategy and "GPSC's Director Skill Matrix"
- Being capable of devoting sufficient time for GPSC, being in good health, being capable of regularly attending the Board of Directors meetings, being an active participant in meetings, being straight-forward, and/or being a businessman with good reputation, good record of work performance and good ethics, as well as being accepted by society
- Capable of providing leadership and able to efficiently and effectively monitor the business conduct of the Company's executives
- Not serving as a director of more than 5 listed companies in the SET

The selection process shall be free from discrimination on grounds of gender, race, religion, or other considerations.

The nomination of candidates to replace directors retiring by rotation at annual general meetings of shareholders shall be published on GPSC's website to invite advance nomination

of qualified candidates from shareholders, after which the Board of Directors will consider their qualifications and propose qualified candidates at annual general meetings of shareholders in accordance with GPSC's criteria.

Appointment of Directors

1) Appointment of Directors to Replace Directors Retiring by Rotation

The Nomination and Remuneration Committee shall select and nominate qualified candidates as defined by GPSC's nomination criteria to recommend to the Board of Directors for approval and to be subsequently proposed at annual general meetings of shareholders for approval by a simple majority vote of the total votes of shareholders attending the meeting and casting votes. The voting procedure is as follows:

- A shareholder shall have one vote for each share one holds or represents.
- Shareholders shall vote for each individual candidate nominated for directorship.
- The candidates shall be ranked in order descending from the highest number of votes received to the lowest, and shall be appointed as directors in that order until all of the director positions are filled. Where the votes cast for candidates in descending order are tied, which would otherwise cause the number of directors to be exceeded, the remaining appointment shall be made by the chairman of the meeting, who shall have a casting vote.

2) Appointment of Directors to Fill Vacancies Incurred by Reasons Other than Expiration of Term of Office

The Nomination and Remuneration Committee shall select and nominate qualified candidates as defined by GPSC's nomination criteria to recommend to the Board of Directors, after which the candidates shall be appointed as directors to fill vacancies with no less than three-quarters (3/4) of the total votes of the remaining directors. The appointed directors shall be in office for as long as the remaining term of office of their predecessors.

Retirement of Directors

- 1) At each annual general meeting of shareholders, one third (1/3) of the total number of the directors must retire from office by rotation. If the number is not a multiple of three, the number nearest to one third (1/3) of the total number of the directors must retire from office by rotation. The directors retiring from office in the first and second years after the registration of GPSC shall be selected by means of lot drawing. In subsequent years, the director who has held office the longest shall retire. A retiring director is eligible for re-election.
- 2) Apart from retirement upon expiration of the term of office, a director shall cease to hold office if he or she dies, resigns, possesses a prohibited characteristic under the law



governing public limited companies and the law governing securities and exchange, is removed by a resolution of the shareholders' meeting, or is removed by a court order.

- 3) Any director who wishes to resign from GPSC shall submit a resignation letter to GPSC. The resignation shall be effective from the time the resignation letter reaches GPSC. A director who resigns may inform the registrar of his or her resignation.
- 4) A shareholders' meeting may pass a resolution to remove any director from office prior to the expiration of the term of office, by a vote of no less than three-quarters (3/4) of the number of shareholders attending the meeting and eligible to vote, and the shares held by the voting shareholders

shall, in aggregate, be no less than one-half of the number of shares held by the shareholders attending the meeting and eligible to vote.

2. Nomination of the Highest-Ranking Executive

In the event that the position of President and Chief Executive Officer becomes vacant, the Nomination and Remuneration Committee is required to review candidates who have qualifications in accordance with relevant criteria and laws as well as other appropriate qualifications, such as knowledge, competency, experience, leadership, and breadth of vision, and nominates such candidates to the Board of Directors at a Board Meeting to be approved for appointment.

GOVERNANCE OF THE INVESTED COMPANIES

GPSC has set a policy on close governance of its invested companies (subsidiaries, associates, and related companies) to constantly safeguard its own interests of investment capital and add value as well as confidence for its stakeholders, as detailed below.

1. Nomination of subsidiaries' and associates' directors and management GPSC has set "Criteria for invested companies' director nomination" as a rule for nominating qualified representatives from GPSC to hold directorship or management position in its invested companies. The number of directors is essentially to be proportional to GPSC's equity or as mutually agreed. The company has no policy of closely controlling its associates.

The duties as GPSC's representatives consist of governance of subsidiaries, associates, and related companies so that they may command an approach or management practices, together with practical guidelines, that strictly agree and comply with GPSC's own policy framework and business directions, including the corporate governance policy, legal policy, finance and accounting policy, quality-safety-occupational health-environmental policy, personnel management policy, and related key policies.

2. Structuring the management of subsidiaries and associates GPSC structures the management of subsidiaries and associates to take responsibility for steering their management and for the performances of subsidiaries, associates, and related companies under the following scope:
 - Monitor and guide the businesses of subsidiaries, associates, and related companies under applicable agreements and regulations
 - Constantly track various aspects of subsidiaries', associates', and related companies' performance and mentor them to ensure that their businesses are in line with goals and that potential obstacles can be promptly and suitably overcome

- Review, monitor, and mentor subsidiaries, associates, and related companies so that they may institute efficient and effective internal control systems and business protocols
 - Review, monitor, and organize reviews and amendment of key policies and work plans for the businesses of subsidiaries, associates, and related companies so that these policies and plans may always be up to date and suitable for business circumstances.
3. GPSC has set a policy on corporate investment and governance of subsidiaries as a framework for its subsidiary management in key aspects such as investment criteria, investment management, operational guidelines, etc.
 4. GPSC defines plans and ensures that subsidiaries, associates, and related companies disclose information about their performance outcomes and financial standings together with factual, complete, and credible information to regulators, related government agencies, outside investors, and the public.
 5. If subsidiaries, associates, and related companies need to engage in connected transactions or those potentially causing conflicts of interest, GPSC must ensure that they do so with transparency and fairness. GPSC will comply strictly with applicable regulators' criteria on connected transaction engagement, and acquisition and disposal of assets.
 6. GPSC will take necessary steps and monitor subsidiaries', associates', and related companies' systematic disclosure of information and internal control systems that are adequate and suitable for their businesses.

PROTECTION AGAINST ABUSE OF INSIDER INFORMATION

In GPSC's operation, directors, executives and employees might be required to learn or consider information that may impact securities prices. As such, GPSC has developed a policy on the protection against abuse of insider information, which has been disseminated among GPSC's directors, executives, and employees. The policy and measures against abuse of insider information are as follows.

POLICY ON THE PROTECTION AGAINST ABUSE OF INSIDER INFORMATION

- 1) GPSC's directors and executives have been informed of their duty to submit reports of change in securities holding of themselves, their spouses, and their minor children to the Securities and Exchange Commission (SEC), a duty of directors and executives as stipulated by the Securities and Exchange Act B.E. 2535 (1992) (including its amendment).
- 2) GPSC's directors and executive must report changes in their holding of GPSC's securities in the Board of Directors' meetings.
- 3) GPSC's directors and executives, including executive officers in accounting or finance at or above the vice president level and employees involved in operations that give them knowledge of insider information material to changes in securities prices, must suspend their purchase and selling of GPSC's securities until the public disclosure of GPSC's financial statements or positions. These individuals will be informed of their suspension in written forms at least 30 days prior to the public disclosure and should wait at least 24 hours after the disclosure before making any trade.
- 4) GPSC's directors, executives, and employees are prohibited from employing insider information that may affect changes in GPSC's securities prices which has not been publicly disclosed but is accessible to them by virtue of their offices or positions to, whether directly or indirectly, purchase or sell, offer to purchase or sell, or invite any other person to purchase, sell or offer to purchase or sell GPSC's stocks or securities (if any) in such a way as to damage GPSC, whether or not such an act is done for their own or another person's benefit, or to disclose such information so that they will receive consideration from the person who engages in the aforesaid acts.
- 5) GPSC's directors, executives, and employees, both current and former, are prohibited from disclosing GPSC's insider information and secrets as well as confidentiality of GPSC's suppliers accessible to them by virtue of their duties to an external person even if such disclosure may not damage GPSC and its suppliers.
- 6) GPSC's directors, executives, and employees, both current and former, are obligated to protect GPSC's confidentiality and/or insider information as well as the duty to use GPSC's insider information solely for its business operations. In addition, GPSC's directors, executives, and employees are prohibited from exploiting GPSC's confidentiality and/or insider information to benefit any other companies in which they are shareholders, directors, executives, and employees.
- 7) Disciplinary actions shall be enforced for any violation of the use of insider information for personal interest, ranging from warning notifications, payment cuts, temporary suspension without pay, or termination of employment. The severity of the disciplinary action is based the intention behind and the gravity of the violation.

PROTECTION AGAINST ABUSE OF INSIDER INFORMATION IN ACTION

- 1) New directors and executives of GPSC was informed and made aware of their duty to report changes in securities holding of themselves, their spouses, and their minor children within three days after such changes via SEC's online system. In addition, current directors and executives will also be reminded regularly via notices and emails to submit reports in changes in securities holding (if applicable).
- 2) GPSC's directors, executives, and relevant employees will be notified in written forms of the black-out period designated by GPSC prior to a public disclosure of information material to changes in securities prices.
- 3) The securities holding GPSC's directors and executives will be disclosed in annual reports and GPSC's website. In addition, the Board of Directors will also track changes in securities holding of GPSC's directors and executives on a monthly basis through reports in the Board of Directors' meetings.



**DIRECTORS AND EXECUTIVES' SHAREHOLDING IN GPSC IN 2019
(INCLUDING SPOUSES AND MINORS)**

NAME - SURNAME		NUMBER OF SHARES		INCREASE / (DECREASE)	REMARK
		DEC 31, 2018	DEC 31, 2019		
DIRECTORS					
1	Mr. Pailin Chuchottaworn	-	-	-	Appointed in 2019
2	Mr. Kurujit Nakornthap	30,000	57,029	27,029	-
3	Mr. Payungsak Chartsutipol	73,000	138,789	65,789	-
4	Maj.Gen. Chaowalek Chayansupap	-	-	-	-
5	Mrs. Nicha Hirunburana Thuvatham	-	-	-	-
6	Mr. Wittawat Svasti-Xuto	30,000	57,029	27,029	-
7	Mr. Wuttikorn Stithit	-	-	-	-
	By spouse	10,000	10,000	No change	-
8	Ms. Peangpanor Boonklum	-	-	-	-
9	Mr. Wirat Uanarumit	N/A	-	-	Appointed in 2019
10	Mr. Kongkrapan Intarajang	-	-	-	-
11	Mr. Bandhit Thamprajamchit	-	-	-	-
12	Mr. Boonchai Chunhawiksit	N/A	-	N/A	Appointed in 2019
13	Mr. Chawalit Tippawanich	25,000	47,000	22,000	-
HIGH - LEVEL EXECUTIVES (SEC'S DEFINITION) AND COMPANY SECRETARY					
1	Mr. Chawalit Tippawanich	25,000	47,000	22,000	-
2	Mr. Samornchai Khoonrak	63,000	73,500	10,500	-
3	Mr. Sirimet Leepagorn	-	-	-	-
4	Mrs. Wanida Boonpiraks	58,000	109,100	51,100	-
5	Mrs. Rosaya Teinwan	N/A	28,228	N/A	Appointed in 2019
6	Ms. Sukittee Chaiyarak	-	-	-	-
7	Mrs. Patrinee Suponthana	-	-	-	-
8	Ms. Pallapa Achanon	N/A	1,000	N/A	Appointed in 2019

Remark:

- N/A means no information as the director/executive was appointed during 2019
- Mr. Wuttikorn Stithit is the only director who has indirect shareholding through spouse, Other do not have indirect shareholding
- As of December 31, 2019; total GPSC shares held directly and indirectly by directors and executives is equivalent to 0.020168

AUDIT AND NON - AUDIT FEES

AUDIT FEES

In the previous fiscal year, the audit fees paid to the Company and its subsidiaries amounted to 10.01 million baht in total, consisting of 1.01 million baht for the Company's auditor and 9.00 million baht for the auditors of the subsidiaries.



NON - AUDIT FEES

In the previous fiscal year, the non-audit fees of GPSC and its subsidiaries, which consisted of fees for auditing compliance with the conditions of the BOI Promotion Certificate, review of financial ratios, accounting and tax consultation, comprised 6.29 million baht paid to the audit firm and 8.69 million baht paid to individuals or businesses related to the Company's auditor.

APPLICATION OF SEC'S CORPORATE GOVERNANCE CODE IN 2017

The Board of Directors has assigned the Management to oversee the application of the Corporate Governance Code for Listed Companies 2017 (CG Code), issued by the Securities and Exchange Commission (SEC), to the business context of the company and monitor CG Code compliance. In 2019, GPSC applied all CG Code principles where applicable to the business.

The area of CG Code where GPSC has yet to comply with is the number of directors. While SEC's CG Code prescribes that there should be no more than 12 directors, GPSC currently has 13 directors as the company is expanding its business and is in need of a more diverse set of skills and qualifications in the Board of Directors.



OTHER GOOD CORPORATE GOVERNANCE PRACTICES

CORPORATE GOVERNANCE

In 2018, GPSC established the Compliance Unit a unit dedicated to compliance in accordance with the vision of the Board of Directors under the supervision of the Company Secretary and Corporate Governance and Affairs Department. In 2019, the Compliance Unit oversaw the Company's compliance in its operations.

GPSC structured its compliance structure in to the concept of Three Lines of Defense:

1. **First Line of Defense** is the unit that owns the process
2. **Second Line of Defense** is the legal and regulatory unit, organizations and corporate risk management units, which are responsible for supervising the operation of each process owner's unit laws, regulations and good internal controls.
3. **Third Line of Defense** is the Internal Audit unit, an independent unit that conducts audit of the first and the second lines of defense. Internal Audit is to report the audit findings directly to the Audit Committee and report the managerial aspect to the President and CEO.



Also, GPSC has set is “Compliance Policy” to serve as guiding principles for its directors, executives, and employees in performing their duty and ensure that the company operates in compliance with laws, rules, regulations, orders, and notifications both internally and externally and help prevent risks of non-compliance. The company's directors, executives, and employees have the duty to follow the following policy:

- 1) Compliance with relevant laws and regulations
- 2) Promotion of fair competition and anti-monopoly practices
- 3) Anti-corruption and anti-bribery practices
- 4) Respect for human rights
- 5) Intellectual property protection and safeguarding
- 6) Anti-money laundering and combating the financing of terrorism (AML/CFT)
- 7) Asset management, confidentiality protection, and appropriate use of the company's information
- 8) Compliance with corporate governance policies and principles

Activities of the Compliance Unit

GPSC has placed great significance on compliance with applicable laws, regulations, and rules. In 2019, the Compliance Unit carried out the following activities.

- The Compliance Unit formulated sub-policies as readily applicable guidelines, which were communicated to GPSC employees to spur adoption. These sub-policies, which were under GPSC's overarching compliance policy, included an anti-money laundering and combating the financing of terrorism policy and an antitrust and fair competition policy, which will be implemented in 2020.
- The Compliance Unit compiled laws relevant to GPSC's operation and consulted relevant internal units to analyze the relevancy of each newly introduced law to the company as well as developed a compliance inventory control system, which detailed the responsibilities and the working status of each unit.
- The Compliance Unit held meetings with PTT Group to ensure uniform practices as well as exchange knowledge and recommendations on compliance-related operations among the companies in PTT Group with the goal of enhancing the efficiency.
- The Compliance Unit developed a compliance monitoring system, which served as an instrument for compiling laws, regulations, and rules related to GPSC's operation; sending alerts to GPSC employees to prevent non-compliance; and preparing compliance reports for the executives.
- The Compliance Unit held a total of three compliance risk management training sessions for its executives and employees to deepen their understanding of their compliance responsibilities.

CORPORATE GOVERNANCE ACTIVITIES AND COMMUNICATIONS

1. PTT Group CG Day

On September 11, 2019, Chawalit Tippawanich, President and Chief Executive Officer of GPSC, along with the executives and employees of PTT Groups, namely PTTEP, GC, TOP, IRPC and PTTOR, attended the opening ceremony of PTT Group CG Day 2019. Organized under the concept "Digitization Challenge for the Governance," the activity was aimed at advancing the corporate governance of the companies in PTT Group and encouraging the use of latest information technology systems to enhance their corporate governance in practice (CG in Practice), with the ultimate goal of ensuring excellence, transparency, and fairness to all stakeholders in their management and of accomplishing growth goals sustainably. The activity was hosted in Synergy Hall in Building C of the Energy Complex in Bangkok.



2. Compliance Risk Management Training Sessions

The Compliance Unit, in collaboration with the Human Resources Management Unit and Office, hosted compliance risk management training sessions to keep GPSC employees informed of their roles and responsibilities related to compliance. The sessions were led by invited speaker Jiraporn Sumetheeprasit.



3. QSHE & KM Day 2019

On August 29, 2019, Pallapa Achanon, Company Secretary and Corporate Governance and Affairs Department, and Patchaneeya Mahaisavariya, Manager of the Compliance Unit, gave a talk entitled "Fighting Fraud" to communicate to the executives and employees the company's anti-fraud and corruption efforts as well as its compliance practices. The session also included tests and games to add elements of fun.

4. Annual Supplier Seminar 2019

On November 14, 2019, Athitayapa Maneechote, a senior compliance officer of the Compliance Unit, communicated to GPSC's suppliers the company's good corporate governance practices and code of business conduct relevant to suppliers as well as the whistleblowing and whistleblower protection policy and the anti-fraud and corruption policy on the receiving/giving of gifts, receptions, or other benefits. The aim was to deepen the participating suppliers' knowledge of the company's corporate governance.



5. National Anti-corruption Day

On September 1, 2019, Chawalit Tippawanich, President and Chief Executive Officer of GPSC, Pallapa Achanon, Company Secretary and Corporate Governance and Affairs Department, and GPSC employees, along with the companies in PTT Group, joined the National Anti-corruption Day event hosted by the Anti-corruption Organization of Thailand to demonstrate GPSC's determination to serve as a model in combating corruption and achieving tangible results. The event was organized under the concept "Join Forces Against Corruption" at the Bangkok International Trade and Exhibition Center (BITEC) in Bangna.

6. International Anti-corruption Day (Thailand)

On December 9, 2019, Attayar Sukotang, Vice President of Corporate Internal Audit, and representatives of GPSC's executive team and employees, along with the executives and employees of the companies in PTT Group, participated in the International Anti-corruption Day (Thailand) event hosted by the Office of National Anti-corruption Commission (NACC). Organized under the concept "Zero Tolerance towards Corruption" in Exhibition Hall 6 of IMPACT Muang Thong Thani in Nonthaburi, the event was presided over by Thailand's Prime Minister, General Prayut Chan-ocha.

CORPORATE GOVERNANCE AWARD (CORPORATE GOVERNANCE REPORT OF THAI LISTED COMPANIES 2019: CGR)

In the Corporate Governance Report of Thai Listed Companies 2019, GPSC was rated excellent (five stars) and received the same average score as in 2018, as detailed below.



YEAR	LISTED COMPANIES (OVERALL)	SET100 INDEX	SET50 INDEX	GPSC
2561	81%	88%	91%	96%
2562	82%	90%	92%	96%

COMPARISON OF SCORES BY CATEGORY

NO.	CATEGORY	SCORE OF 2018					SCORE OF 2019		
		LISTED COMPANIES (OVERALL)	LISTED COMPANIES (OVERALL)	LISTED COMPANIES (OVERALL)	LISTED COMPANIES (OVERALL)	LISTED COMPANIES (OVERALL)	SET100 Index	SET50 Index	GPSC
1	Rights of Shareholders	96%	96%	96%	96%	94%	97%	97%	98%
2	Equitable Treatment of Shareholders	95%	95%	95%	95%	92%	96%	97%	98%
3	Roles of Stakeholders	88%	88%	88%	88%	81%	90%	93%	98%
4	Disclosure and Transparency	93%	93%	93%	93%	86%	94%	96%	99%
5	Board Responsibilities	82%	82%	82%	82%	75%	84%	87%	94%





SUSTAINABILITY MANAGEMENT

SUSTAINABILITY AND STAKEHOLDERS MANAGEMENT

GPSC recognizes the importance of stakeholder engagement and believes that a good relationship on the basis of trust as well as the opinions and suggestions of the stakeholders are invaluable assets to the company and contribute to its ability to achieve sustainable development and growth. Furthermore, stakeholder management will enable GPSC to efficiently address the needs of its stakeholders, diminish image risks and risks of business interruption, as well as maximize benefits for all stakeholders. The company regularly communicates with its stakeholders to ensure their understanding of current issues of interest and seek their opinions, which are used to inform the company's decision making and planning processes.

In 2019, GPSC, in collaboration with its subsidiary Glow Energy Public Company Limited, reviewed its stakeholder management as well as identified and prioritized all of its groups of key stakeholders throughout the supply chain more exhaustively. The company also explored ways to efficiently and appropriately address the expectations and concerns of its stakeholders and use the information obtained to formulate a stakeholder engagement guideline. The stakeholders can be categorized into eight major groups, namely 1) shareholders, 2) investors, 3) relevant government and other agencies, 4) employees, 5) suppliers and contractors, 6) business partners, 7) customers, and 8) communities and society. The communication and engagement models for each specific group differ as detailed below.

1. SHAREHOLDERS

Recognizing its obligations to shareholders, GPSC has translated company ethics into clear policies that will maximize business growth and ensure sustainable returns from good business performance. The company also respects the shareholders' right to receive and access material information and discloses its performance data and other supporting data in a transparent and accountable manner.

2. INVESTORS

GPSC recognizes the expectations of its investors and is aware that investors today base their decisions not only on an analysis of the company's financial statements but also on its environmental, social, and governance practices. Therefore, GPSC has placed emphasis on disclosing factually accurate information regarding its financial performance and operating performance in key ESG-related areas, such as corporate governance, supply chain management, resource and environmental management, employee care, community engagement, and innovation development to assure investors of the long-term growth of investment returns.

3. RELATED GOVERNMENT AND OTHER AGENCIES

GPSC works closely with both domestic and international government agencies in countries where it makes investments to avoid making inappropriate transactions with the government sector that may negatively impact its operations. Therefore, any coordination, contact, and exchange of information with these government agencies are carried out on the basis of appropriateness and transparency and in compliance with relevant laws and regulations to ensure appropriate conduct by its employees. GPSC also supports various activities that aimed at fostering long-term relations with government agencies.

4. EMPLOYEES

Recognizing that employees play a vital role in driving the company towards success, GPSC places great significance on continuous human resources development and thus provides personnel development programs for career advancement for employees in all sections and departments without discrimination. In addition to providing a safe work environment and suitable remuneration and welfare, GPSC consistently introduces innovative technology to support their employees to enable them to fulfill their duties with maximum efficiency. Furthermore, with a conviction that CSR is a way to enable its employees to enhance their potential and self-esteem, GPSC consistently promotes employee participation in its CSR and environmental activities, which reflect its social responsibility. These activities are hosted under its sustainable management framework, which strictly adheres to its corporate governance principles and aims to forge employees into good citizens, promote stakeholders' participation, and foster social and environmental consciousness.



5. SUPPLIERS AND CONTRACTORS

GPSC values its suppliers and has therefore put in place a corporate governance framework that ensures transparency and fairness as well as efficiently implemented its policies for fair and equitable treatment of suppliers. In addition, it has introduced GPSC Supplier Sustainable Code of Conduct, which suppliers are required to comply with and adopt as guidelines, and encouraged its suppliers to introduce sustainable development practices to their businesses for long-term mutual growth.

6. BUSINESS PARTNERS

GPSC values the cooperation of its business partners throughout the value chain. Given the rapidly changing business landscape and the connectedness brought on by globalization, business partners play a vital role in making collaborative efforts to mutually reduce business risks, create competitive advantages, and add value to the business in a sustainable way.

7. CUSTOMERS

As an electricity producer and utility provider, GPSC carries out its responsibility of fulfilling customers' requirements at the volumes and time specified by customers. The company delivers quality goods and services at fair prices and strives to foster good relations with customers on the foundation of good governance, transparency, trust, and mutual assistance.

8. COMMUNITIES AND SOCIETY

GPSC strictly follows its social responsibility policy to ensure that communities and its industrial entities can co-exist and jointly create sustainable value through activities that elevate the quality of life and enhance the potential of communities. To this end, GPSC has established strategies for its social and environmental activities, which can be divided into four dimensions as follows:

1) Education

GPSC supports sustainable education by providing continuing scholarships, organizing supporting activities, and helping develop schools both in and outside of its operating areas in accordance with governmental policies.

2) Quality of Life Improvement

In addition to creating jobs for residents in communities, GPSC hosts activities for the senior's club, capacity-building activities for village health volunteers, mobile clinics, and activities aimed at enhancing community safety and security.

3) GPSC Organizes and Supports Public Service

Activities as well as public participation activities for neighboring communities to foster mutual understanding and good relations, including meetings, discussions, and public hearings aimed at receiving feedback from communities and concerned agencies as well as an open house for communities so as to inspire confidence in GPSC's operation.

4) Environment

As part of its social and environmental responsibility, GPSC recognizes that the increasing amount of waste in Rayong, at present 1,000 tons per day, is a big problem. Therefore, GPSC has joined hands with the government sector (Rayong Provincial Administration Office and Rayong) to solve waste management problems. The effort has resulted in a "waste-to-energy plant," which is expected to reduce around 500 tons of waste in the area each day and produce 9.8 megawatts. Particles and gas from waste incineration are managed in accordance with international standards and do not affect the neighboring communities. The waste-to-energy plant is expected to be a prototype for a public-private collaboration program.

Furthermore, out of concern for the areas and communities around its power plants and to minimize potential impacts, GPSC has initiated projects that aim to reduce pollution emissions. In addition to consistently upgrading the technology in its plants to ensure efficiency and monitoring the environmental quality of its production, it has set up air quality measuring stations in community areas and planted trees around its plants to filter any pollution.

MAJOR PROJECTS AND ACTIVITIES IN 2019

EDUCATION

GPSC YOUNG SOCIAL INNOVATOR PROJECT

GPSC recognizes the significance of sustainable social, economic, and environmental development and the adoption of the Sustainable Development Goals (SDGs) in fulfilling its primary goal related to energy, natural resources, and environmental development. To this end, the company organized the GPSC Young Social Innovator for the second year to give high school students and vocational students as well as those with equivalent degrees an opportunity to submit proposals for projects, products, or processes that were aimed at solving actual social, economic, natural resources, and environmental issues in their locality in a sustainable way and could be further developed into social enterprises. This project would ultimately lead to collaboration between GPSC and communities and contribute to the sustainable development of the country.



In 2019, the project was scaled up, admitting applicants not just from the eastern region as in the previous year but from across the country. Out of the over 200 entries submitted, a total of 30 passed the qualifying round, consisting of four from the north, seven from the central region, six from the northeast, nine from the east, and four from the south. Of these, the five following proposals passed on to the final round.

1. Team Tonkla Plian (Loke from Prachinkallayanee School, Prachin Buri): Underground water capsules for saplings
2. Team Better Life Battery (Kamnoetvidya Science Academy, Rayong): Modification of Li-S battery with irradiated activated carbon derived from sticky rice
3. Team Rak Loke (Kamnoetvidya Science Academy, Rayong): Microbial electrochemical cells for power generation from wastewater: The preparation of electrodes carrying iron nanoparticles bonded to graphene oxide with L - cysteine for enhanced bacterial capture efficiency in wastewater
4. Team Fruit Guard (Phanom Sarakham Phanom Adun Witthaya School, Chachoengsao): Artificial fruit peel
5. Team PM 4.0 (Princess Chulabhorn's College Mukdahan, Mukdahan): Development of hydrogel from chitosan and polyvinyl alcohol for the nursery of Gor Kor 6 rice seedlings

GPSC will dispatch experts to these schools to provide consultation to each team in preparation for the final round, which will take place in March 2020. The winner will receive a prize and an opportunity to develop their invention into a social enterprise.



There were also four other interesting entries in the qualifying round that could be developed into products or projects that would benefit communities and society at large, to which GPSC granted financial support, so that they could conduct test runs. These entries were as follows:

1. Nanoclay -coated packaging for agricultural product shelf life extension by Saint Nicholas School in Phitsanulok
2. Acid dropper and rubber mixer equipment set by Phanom Sarakham School "Phanom Adun Witthaya" in Chachoengsao
3. Cashew nut skin removing machine by Trat Technical School in Trat
4. Lalailam: Nut Processing for Community Occupation Promotion by Lanna Polytechnic Chiang Mai Technological College in Chiang Mai

GPSC will provide experts and staff to help these students develop their inventions and conduct test runs in their communities throughout 2020.



The company also continued to support the contestants from the previous year. In 2019, GPSC provided experts to give advice on two projects, namely 1. Smart Biogas by Princess Chulabhorn Science High Schools in Chonburi (Winner) and 2. The Food Waste Separating Machine by Kamnoetvidya Science Academy in Rayong (First runner-up). In addition to providing experts and financial support, GPSC also held a patent workshop for them. Both teams have already filed patents for their inventions.

GPSC also entered both teams in the Seoul International Invention Fair 2019 in Seoul, South Korea, where the Smart Biogas Project won the Silver Prize, while the Food Waste Composing Machine was given a Special Award by the Indonesian Invention and Innovation Promotion Association (INNOPA) in Indonesia.

EDUCATION LEADERSHIP PROGRAM FOR SUSTAINABLE EDUCATION PROJECT (CONNEXT ED)

Recognizing the value and vital role of education as the foundation of the development of the country, GPSC has consistently lent support to CONNEXT ED, aimed at developing a network of leaders who will contribute to the sustainable development of Thailand's education through knowledge exchange and by planning school development with school executives. This project helps address three main needs of the country, namely disparity reduction, human resources development, and competitiveness enhancement, all of which are related to the development of the country's human resources. This activity is also in line with the Sustainable Development Goals (SDGs) established by the United Nations.

GPSC has been part of the project since 2016 and had its CSR personnel serving as coordinators, known as school partners, to ten schools, namely Ban Wang Takian School, Wat Kor School, Ban Won Ta Kraeng School, Wat Ban Na School, Prakob Rat Bamroong School, and Wat Sukaram School in Chachoengsao; and Wat Phala School, Wat Thapma Community School, Wat Koh School, and Ban Phayun School in



Rayong. Over the course of more than three years, GPSC have been working with the administration and faculty of these ten schools in its capacity as a school partner to develop their thinking and learning processes and improve their instruction and learning, focusing on fostering facilitator skills in teachers to enable them to design sustainable education development projects suitable for the context of their own schools. This project is a source of pride of the company and demonstrates its commitment to contributing to the sustainable development of human resources in Thailand's education.

In 2019, GPSC focused its support on STEM and English skill development, both of which were essential for youths in the 4.0 era. The company invited teachers from the ten schools to join two STEM and English skill development workshops hosted by PTT Group and visited their schools to track their ability to apply what they had learned to classroom instruction throughout the year. After PTT Group's STEM - CAT test was administered to the students taught by these teachers, it was found that they showed an improvement in their analytical and problem-solving skills and their ability to apply and integrate their knowledge.

SPONSORSHIP FOR KAMNOETVIDYA SCIENCE ACADEMY AND VIDYASIRIMEDHI INSTITUTE OF SCIENCE AND TECHNOLOGY

GPSC and companies in PPT Group have established an academy and an higher education institute geared specifically towards science, technology, and research with a caliber comparable to that of the world's leading institutions, with the goal of fostering science and technology excellence and produce students who will be able to bring about exponential growth and put Thailand in the forefront of Asia among other leading countries. The main objective of the project is to create researchers, new bodies of knowledge, innovation, as well as foster inquisitiveness to advance Thailand's development. Her Royal Highness Princess Maha Chakri Sirindhorn graciously named Rayong Science Academy and Rayong Science and Technology Institute "Kamnoetvidya Science Academy" and "Vidyasirimedhi Institute of Science and Technology,"

respectively. The two academies are located on an area of over 900 rai in Payupnai Sub-district, Wangchan District, Rayong. GPSC's sponsorship for the establishment and management of the two institutes in the first phase spans a five-year period from 2017 to 2021.

In 2019, GPSC resolved to continue the second phase of their support for both institutes for a period of ten years from 2018 to 2027. In addition to the aforementioned first-phase sponsorship, it also provided a four-year undergraduate scholarship to a student from Kamnoetvidya Science Academy who pursued further studies at Vidyasirimedhi Institute of Science and Technology.



SCHOLARSHIP FOR THE ADVANCED VOCATIONAL MANPOWER DEVELOPMENT PROJECT (IPEC)

As part of PTT Group's scholarship program for vocational students (high vocational certificate) participating in the Advanced Vocational Manpower Development Project (iPEC), GPSC has signed a memorandum of understanding (MOU) to award scholarships to petrochemical and energy technology students at IRPC Technological College during the period of 2017-2020.

GPSC has so far granted scholarships to three batches of selected awardees. In 2019, GPSC hired the first-batch awardees as employees and accepted the second-batch awardees as interns at Rayong Central Utility Plant 2, starting in May. The company also successfully selected the third batch of awardees, all of whom were admitted to IRPC Technological College.

AEC-MERIT SCHOLARSHIP

PTT Group has been granting scholarships to students from AEC countries enrolling in a high vocational certificate program in Machine Shop Mechanics (English program) at IRPC Technological College under the AEC-Merit Scholarship Program since 2013. In 2019, IRPC Technological College conferred high vocational certificates to the third batch of scholarship awardees and granted scholarships to vocational students in its seventh class. GPSC joined the scholarship ceremony, attended by delegates from the Department of Electricity and Energy and the Department of Education of the Republic of the Union of Myanmar.



QUALITY OF LIFE IMPROVEMENT

LIGHT FOR A BETTER LIFE PROJECT

Reflecting GSPC's role as the power flagship of PTT Group, the Light for a Better Life Project helps maintain the electrical system for communities and society at large by leverages its people expertise. Its missions are divided into four main components: safety, energy saving, energy security, and social enterprise. Its operations in 2019 are summarized below.

1. **Safety:** This component involves the repair and maintenance of electrical systems to reduce risks of fire and electrocution and potential damage to life and properties in local schools, temples, and hospitals. In 2019, maintenance and repair work was carried out in four schools in Rayong, namely Wat Koh School, Wat Phala School, Wat Thapma Community School, and Ban Phayun School.
2. **Saving Energy:** This component involves replacing existing electrical devices and appliances to improve energy efficiency and switching to renewable energy to reduce expenses, which the organization could dedicate to other beneficial activities. In 2019, the project replaced electrical devices and appliances with energy-efficient ones in four schools in Rayong, namely Wat Koh School, Wat Phala School, Wat Thapma Community School, and Ban Phayun School. In addition, as part of the project, a ground-mounted solar power system was also installed at Doi Hang Temporary Prison in Chiang Rai to reduce its electrical expenses, enabling it to use the saved expenses to help the underprivileged in society. The solar power system installation at Doi Hang Temporary Prison yielded a social return on investment (SROI) ratio of 1.486, or 148.6%.



3. **Energy Security:** This component involves the installation of alternative-energy power generation systems in remote areas to improve energy security and the quality of life for the local residents. Among the initiatives of the project is the installation of the solar rooftop at Ko Sichang Hospital in Chonburi and at Thanyarak Hospital in Mae Hong Son, where inadequate power production directly affected their operations, which required energy sufficiency and stability around the clock. Currently, Ko Sichang Hospital has successfully reduced 19,000 baht in electrical expenses and 1,700 KgCO₂e in carbon dioxide emissions each month. The solar rooftop installation at both hospitals yielded a social return on investment (SROI) ratio of 1.138, or 113.8%, and 1.016, or 101.6%, respectively.
4. **Social Enterprise:** The project aimed to develop "electricity doctors" in each community. To this end, local residents were trained in basic electrician skills, which would enable them to maintain and repair electrical systems in their communities, earn extra income, and potentially become professional electrical technicians. The second-batch participants of the Light for a Better Life Project were trained and given an opportunity to put their skills to practice in real-world scenarios, for which they were fairly remunerated.

PUBLIC SECTOR ENGAGEMENT, COMMUNITY SERVICE, AND SOCIAL BETTERMENT

KHIANG BA KHIANG LAI PROJECT

GPSC regularly organizes the “Khang Ba Khang Lai” (working side by side) project, in which the company visits the neighboring communities in Map Ta Phut Municipality, Map Kha Patthana Municipality, and Ban Chang Municipality to open dialogues with them with the goal of promoting an understanding of the company’s operations and maintaining good relations.

In 2019, GPSC targeted a total of eight communities in the three-kilometer radius of its power plant or its four utility centers: Huai Pong Nai 2 Community, Map Chalut Community, Map Chalut-Chak Klang Community, Nong Phak Nam Community, Nong Preu Community, Lo Kwian Community, Prachummit Community, and Fah Si Thong Community. In the discussions, GPSC presented an overview of its operations, especially with respect to safety, occupational health, and the environment, which were topics that the communities expressed great interest in. It also offered an educational session under the topic of “safety in daily life,” which covered basic CPR, road safety, basic use of fire extinguishers, maintenance of household electrical systems, choosing electrical appliances, reducing electrical expenses, and energy saving. These discussions also included Q & A sessions.



GPSC: ONE EARTH ONE FAMILY (COASTAL RESTORATION)

GPSC values communities in its vicinity as major stakeholders in its business operations. As such, community visits are conducted on a regular basis. In addition, the company also encourages its employees to take on volunteer work or pay back to society in various forms.

In 2019, GPSC and its volunteering employees worked with a local fishery group in Hat Phayun in Ban Chang Sub - district, Rayong, to restore the coastal areas through GPSC: One Earth One Family, organized for the third consecutive year with the main goal of restoring marine ecosystems and promoting sustainable and mutual development between communities and GPSC. The project consisted of three main activities, namely the release of 3,000,000 shrimp and crabs into the wild, the renovation of a local fishery building to improve the quality of life for the members of the fishery group, and a beach cleanup aimed at keeping this tourist attraction of Ban Chang in pristine condition. The project also served to raise public awareness of the company’s CSR initiatives in communities where GPSC operated and demonstrated the volunteer spirit and altruism of GPSC’s employees.





GPSC FOOTBALL CLINIC

GPSC Football Clinic 2019 was held by GPSC in collaboration with Huai Pong Nai 2 Community in Map Ta Phut Municipality in Rayong, which is located next to GPSC's Rayong Central Utility Plant 2 and supports its youths in pursuing football. Recognizing the importance of sports and their role in promoting health, good use of leisure time, and the development of youths into quality citizens, GPSC supported the sport activities in addition to the scholarships that it had been providing.

GPSC and Huai Pong Nai 2 Community jointly initiated the project to offer their youths an opportunity to train with professional footballers, which could further inspire those seeking to represent their community or country in football competitions or pursue football as a career.



CULTURAL AND RELIGIOUS ACTIVITIES

GPSC fulfills its duty as an organization that connects religious traditions and people in communities, with the goal of preserving Buddhism, which serves as an anchor for people in communities. It also joins local temples, schools, and government agencies in hosting cultural events and religious activities to help keep local traditions alive.

In 2019, GPSC, along with the Buddhists in the communities around its plants, served as the host of its annual charity event at Wat Phak Nam in Nikhom Phattana Sub-district in Rayong and Wat Prachummit in Ban Chang Sub-district in Rayong, as well as participated in various cultural festivals, such as Boon Khao Larm, Songkran, and Loy Krathong. Furthermore, GPSC employees also volunteered in various public service activities on various occasions, including a community development activity in celebration of the 66th birthday of His Majesty King Rama X.



ENVIRONMENT

ENVIRONMENT ZERO WASTE VILLAGE

As an integrated waste management business operator, GPSC shares its waste management knowledge with communities, encourages them to carry out waste reduction activities, which can be further developed into a source of additional income or into social enterprises, and promotes sustainability within communities. In 2019 the Zero Waste Village Project was carried out in four areas surrounding its Refuse Derived Fuel (RDF) power plant, namely, Thapma Sub-district Municipality, Nam Khok Sub-district Municipality, Map Kha Sub-district Municipality, and Nong Taphan Sub-district Administration Organization. The initiatives undertaken can be divided into six categories as follows.

- 1. Waste Banks:** The local residents are educated on household waste sorting to maximize their income from waste selling. Two waste banks have been established in Rayong, namely Moo 1 Waste Bank in Nong Taphan Sub-district, Ban Khai District, and Moo 3 Waste Bank in Nam Khok Sub-district, Muang District. In 2019, both waste banks purchased a total of 15.5 tons of waste combined, effectively reducing carbon dioxide emissions by 11.6 tCO₂e. Furthermore, Moo 1 Waste Bank in Nong Taphan Sub-district was also named the best community enterprise of 2019 in its district.
- 2. Recyclable Waste Donation:** GPSC received a donation of 9,999 plastic bottles from Moo 6 Community in Nong Taphan Sub-district, which were turned into polyester fibers for the manufacturing of 25 Buddhist monk robes in the project named "Turning Plastic Bottles into Monk Robes for the Buddhist Lent." The robes were given to monks in three temples, namely Wat Nong Saphan, Wat Pak Pa, and Wat Koh Aranyikawat in Rayong.
- 3. Waste Management Leader Training:** GPSC held waste management camps in six schools in Rayong to help them develop waste management capabilities in accordance with their readiness and context. These schools were namely Wat Koh School, Wat Nam Khok School, Ban Nong Saphan School, Wat Thapma Community School, Wat Krachet School, and Wat Map Kha School. Afterwards, each school was also granted 10,000 baht to implement the waste management initiatives that it had proposed at the training camp, with GPSC tracking the progress and assessing the outcome throughout the academic year.
- 4. Waste Management Awareness Training Session:** GPSC held training sessions to raise awareness of waste problems and educate participants on the management of different type of household waste, namely recyclable, organic, hazardous, and non-recyclable waste. Two sessions were organized for local residents, attended by 30 households each. Three sessions were also offered to government agencies from other areas, namely 100 village leaders under Makha Sub-district Administration Organization in Non Sung District, Nakhon Ratchasima; 80 executives and employees from Muang Roi Et Municipality in Roi Et; and 100 municipality officers and members of Taphong Sub-district Administration Organization in Muang District, Rayong. The three parties paid a visit to Moo 1 Ban Phai Waste Bank, which GPSC is developing into a community waste management learning center, to observe its community waste management operations.
- 5. Greek Market:** GPSC educated the vendors of the Nam Khok Municipality Market on waste management and how to run a green market as well as helped them formulate a guideline on eco-conscious practices. The market is scheduled to be renovated and officially begin operation as a green market in 2020.
- 6. Waste Processing for Added Value:** This initiative encouraged the residents of Ban Phai Community in Nong Taphan Sub-district to turn the overwhelming amount of betel nut husk in the community, which was organic waste, into dishes and bowls not only to reduce waste but also add value to any remaining refuse. Currently, the betel nut husk dishware has become an additional source of income and livelihood for the community.



Furthermore, the Zero Waste Village Project received the Asia Responsible Enterprise Award 2019 in the Green Leadership Category from Enterprise Asia on May 24, 2019 in Taiwan.

KHUNG BANGKACHAO

WASTE MANAGEMENT WORKING TEAMS

Conceived in collaboration with over 34 Thailand's leading organizations (as of September 2019), OUR Khung BangKachao Project is a project that strives to engage communities and apply the King's Philosophy as well as Sufficiency Economy, both developed by His Majesty King Bhumibol Adulyadej the Great, to the conservation of Khung BangKachao, with the goal of revitalizing this green oasis as well as enhancing the quality of life for local residents and improving the local economy.

The key element of "OUR Khung BangKachao" Project lies in the Social Collaboration with Collective Impact Model, which focuses on engaging the local communities to truly address their needs and bring on community-centric development on the basis of shared goals for collective impact. The member organizations bring a diverse range of expertise, knowledge, innovation, technology, which are integrated to optimally develop the project. There are seven working teams, each serving as a piece of jigsaw puzzle that, when put together, creates a complete integration of operations from upstream to downstream to achieve the project's goals and address the needs of the local communities. The seven working teams are as follows.

- Green Development
- Youth, Education, and Culture Development
- Water Management and Erosion Control
- Waste Management
- Income Augmentation
- Tourism
- Backbone and Communication Team



In 2019, GPSC joined the project and assigned three of its CSR officers to the Waste Management Working Team to help it achieve its goals. The company also supported the Green Development Working Team by organizing a volunteer activity aimed at developing green areas on the 12.24 -rai land in Bang Krasop Sub -district, Phra Pradaeng District, Samut Prakan in honor of His Majesty the King.



CONNECTED TRANSACTIONS

GPSC AND SUBSIDIARIES' CONNECTED TRANSACTIONS WITH POTENTIAL PARTIES OF CONFLICT

1. PTT PUBLIC COMPANY LIMITED (PTT)

PTT is a major shareholder of GPSC, with 22.81% of shares. There are six members of the Board of Directors who concurrently hold directorship or executive positions at PTT, namely: Mr. Wittawat Svasti - Xuto, Mr. Wuttikorn Stithit, Ms. Peangpanor Boonklum, Mr. Kongkrapan Intarajang, Mr. Wirat Uanarumit and Mr. Chawalit Tippawanich.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Income from consultation service		GPSC Group was contracted by PTT as a consultant for the project involving using polymers in the solar floating PV system at an agreed price and under terms and conditions considered normal business practice.
- Revenue	1.80	
- Receivables	0.68	
Other income from financial rewards received from PTT		GPSC staff represented the company under PTT Group Operational Excellence and SPIRIT Award contest Projects, and were selected for financial rewards.
- Revenue	0.02	
Other income from pipe - rack rental		GPSC Group leased out its pipe-racks at a price and under terms and conditions considered normal business practice. Payment was made in advance and was booked as a fee for the long - term right to use the asset; however, income was gradually booked throughout the contract period.
- Revenue	0.52	
Purchase of natural gas		GPSC and subsidiaries purchased natural gas as raw material for power generation with prices and terms considered normal business practice
- Expenses	33,226.81	
- Payable	3,456.87	
PTT secondment staff		PTT seconded its employees to GPSC in support of GPSC's business with prices and terms considered normal business practice.
- Expenses	67.93	
- Payable	20.10	
Pipe - rack rental		GPSC requested rental of pipe-racks with prices and terms considered normal business practice. Since GPSC paid six months' rent in advance, this was treated as an advance expense item.
- Expenses	1.20	
- Receivable	0.62	
Expenses on the use of pipeline and associated equipment		GPSC Group invested in a gas distribution system under a gas sales agreement with PTT. GPSC Group will transfer the system to PTT in exchange for the right to use such asset throughout the contract period. GPSC Group already booked the cost as deferred expenses and amortization throughout the contract period.
- Expenses	7.64	
- Interest payment	2.46	
- Advance payment	0.97	

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019		JUSTIFICATION AND SENSIBILITY
	(THB MILLION)		
Gas pipeline system inspection			GPSC hired PTT to run a standard safety test of the pipeline system to ensure its operability at a price comparable to other vendors.
- Expenses	2.75		
- Payable	2.67		
Expenses on making a simulated system and inspection and reports related to gas pipeline system			GPSC hired PTT to design a simulated model in a study on temperature effects inside the steam pipes after passing through the desuperheater control (reactor) and to measure the total organic carbons (TOC) as well as to prepare reports on the gas system. The service was charged at a market price, considered normal business practice.
- Expenses	0.24		
- Payable	0.08		
Use of PTT’s service center			PTT set up a service center within its headquarter and EnCo, including a medical care center, fitness center, air booking center, and training center, and charged the fees at the same rate charges to PTT Group with prices and terms, considered normal business practice.
- Expenses	0.17		
- Payable	0.81		
Expenses on system maintenance			GPSC Group signed a system maintenance contract with PTT at prices and on terms considered normal business practice.
- Expenses	0.34		
Expenses on training			The expenses involve personnel development training to enhance staff’s knowledge and skills to meet commercial requirements.
- Expenses	2.86		
- Receivable	0.20		
Short – term loan			As financial assistance for GPSC, PTT charged interest at a rate comparable to commercial banks’ short-term interest rates under a similar loan period and other terms.
- Loan interest	550.57		
- Accrued interest	0.67		

2. PTT GLOBAL CHEMICAL PUBLIC COMPANY LIMITED (GC)

GC is a major shareholder of GPSC, with 22.73% shares. In addition, Mr. Wittawat Svasti-Xuto, Mr. Kongkrapan Intarajang and Mr. Boonchai Chunhawiksit, GC directors and management executives, serve as GPSC directors.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and GC entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC.
- Revenue	7,012.50	
- Receivable	655.56	

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019		JUSTIFICATION AND SENSIBILITY
	(THB MILLION)		
Income from engineering design, procurement and construction (EPC) service			GPSC made a contract with GC on providing EPC service at prices and on terms similar to those for other customers related or unrelated to GPSC, considered normal business practice.
- Revenue	21.11		
- Expenses	14.67		
- Receivable	8.41		
Other income from pipe – rack rental			GPSC Group leased out pipe - racks under a contract with rental rates and terms considered normal business practice. GPSC Group received the rental in advance, which was booked as income received in advance for the long - term right to use such asset while gradually booking income throughout the contract period.
- Revenue	8.67		
- Expenses	0.69		
- Payable	1.03		
Repurchase of condensate containing water in excess of the volume specified in the contract, returned by the customers			Under the steam agreement, CG was required to return condensate of the contractual volume. Since GPSC needed more condensate than the contractual volume, it requested to repurchase such condensate from PTTGC over and above the contract volume with prices and terms, considered normal business practice.
- Expenses	4.14		
Expenses on tail gas purchase			GPSC purchased tail gas for power generation at a price and under contractual conditions considered normal business practice.
- Expenses	246.38		
- Payable	23.87		
Expenses on training			The expenses involved a personnel development course on Data Science and Engineering to enhance staff's knowledge and skills to meet commercial requirements.
- Expenses	0.55		
- Receivable	0.03		
Expenses on pipeline system inspection			GPSC Group commissioned a pipeline standard test at a price comparable to other vendors.
- Expenses	0.18		
- Payable	0.03		
Rental and other related services			GPSC Group entered into a land lease with an industrial estate which entailed some service fees. The rental rate, service fees, and other conditions are considered normal business practice.
- Expenses	0.23		
- Payable	0.05		
Short – term loan			GPSC received financial assistance offered with interest at a market rate comparable to commercial banks' short - term interest rate under similar loan period and other conditions.
- Loan interest	163.13		
- Accrued interest	0.20		



3. THAI OIL PUBLIC COMPANY LIMITED (TOP)

TOP holds 8.91% of GPSC's shares. In addition, Mr. Wirat Uanarumit, Mr. Bandhit Thamprajamchit, TOP director and management executives, serves as a GPSC director.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Income from the sale of industrial water		GPSC made a contract with TOP at prices and under terms comparable to other customers related and unrelated to GPSC.
- Revenue	32.82	
- Receivable	5.13	
Other income from compensation for land sublease and office demolition		This was compensation for land sublease and office demolition agreed at a market price, considered normal business practice.
- Revenue	3.18	
Purchase of diesel		GPSC uses diesel as reserve fuel at the Sriracha Power Plant in case of natural gas delivery interruption with prices and terms, considered normal business practice.
- Expenses	17.37	
- Payable	4.92	
Land rental		Sriracha Power Plant lies on state property over which TOP earned possession and usage rights. TOP subleased such land to GPSC with prices and terms that followed the same guidelines as those for other customers.
- Expenses	6.52	
- Receivable	4.65	
- Deposit	2.93	
Raw - water pipe rental		GPSC rented TOP's raw - water pipes at the Sriracha Power Plant, linked to Eastern Water Resources Development and Management Plc. (EW)'s raw - water pipes, to buy water from EW with prices and terms, considered normal business practice.
- Expenses	3.09	
- Payable	8.27	
Office rental and water & electricity bills		GPSC rental office space from TOP since Sriracha Power Plant was located on TOP's land with prices and terms, considered normal business practice.
- Expenses	2.41	
- Payable	0.19	
- Receivable	0.11	
Community relations activities		TOP advanced payment for community relations activities jointly held with GPSC, to be reimbursed by GPSC, considered normal business practice
- Expenses	0.36	
- Payable	0.20	
Construction expenses		The Group and TOP entered into a purchase agreement for products for the Energy Recovery Unit (ERU) Project, with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC.
- Prepaid expenses	439.90	

4. THAIOIL POWER COMPANY LIMITED (TP)

TP holds 20.79% of GPSC's paid-up registered capital. In addition, Mr. Wirat Uanarumit, Mr. Bandhit Thamprajamchit, serve as their common directors.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of industrial water		GPSC and TP entered into a sales agreement of industrial water with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC.
- Revenue	22.20	
- Receivable	0.47	

5. IRPC PUBLIC COMPANY LIMITED (IRPC)

GPSC and IRPC have a common major shareholder, namely PTT, which holds 47.55% of IRPC's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power and steam		IRPC - CP and IRPC entered into individual sales agreements with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to IRPC - CP.
- Revenue	2,356.47	
- Receivable	410.88	
Purchase of power, steam, industrial water, and wastewater treatment		Since IRPC - CP's plant was on the compound of IRPC's plants, the company purchased each product and paid treatment charges to IRPC for system testing at the identical rate charged to others in the vicinity.
- Expenses	58.90	
- Payable	6.94	
Office space rental, water and electricity bills, and central utilities		IRPC - CP rented EnCo's office space, and with most of its business partners' headquarters at EnCo, the Company conveniently coordinated with business partners. The rental followed the rates set under an agreement with IRPC, considered normal business practice.
- Expenses	4.09	
- Payable	1.91	
Advance received for steam sale under Mini-mum Take - or - Pay terms		Since the actual annual value of product purchase was lower than the minimum value specified in the contract, IRPC - CP requested advance payment (Minimum Take - or - Pay: MTOP) from IRPC. If the purchase volume exceeds the minimum volume specified in the contract within an agreed period, IRPC can seek refund of such advance payment commensurate with the excess volume consumed. IRPC - CP will book the remaining MTOP as the revenue for the year if IRPC is unable to consume steam over the minimum volume.
- Payable	295.88	
- Receivable	142.88	

6. BUSINESS SERVICES ALLIANCE COMPANY (BSA)

GPSC holds 25% preferred shares of BSA's paid-up registered capital. Also, both companies have a common major shareholder, namely PTT, which owns BSA's common shares accounting for 25% of BSA's paid-up registered capital, and GV which hold 25% preferred shares of BSA's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Staff outsourcing service		GPSC Group hired BSA to provide outsourcing services of
- Expenses	46.91	personnel to fit GPSC's objectives with prices and terms,
- Asset cost	4.36	considered normal business practice.
- Payable	16.40	

7. PTT PHENOL COMPANY LIMITED (PPCL)

GPSC and PPCL have a common major shareholder, namely GC, which wholly owns PPCL's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, industrial water, and nitrogen		GPSC and PPCL entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	3,291.83	
- Receivable	460.73	
Other income from pipe - rack rental		GPSC Group leased out pipe-racks under a contract with rental rates and terms considered normal business practice. GPSC Group received the rental in advance, which was booked as income received in advance for the long-term right to use such asset while gradually booking income throughout the contract period.
- Revenue	0.47	

8. GC MAINTENANCE AND ENGINEERING COMPANY LIMITED (GCME)

GPSC and GCME have a common major shareholder, namely GC, which wholly owns GCME's paid-up registered capital. In addition, Mr. Boonchai Chunhawiksit, serve as their common director.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Machinery maintenance and repair		GPSC engaged in a power plant service and maintenance agreement with GCME, an expert in maintenance, at mutually agreed prices and terms, considered normal business practice.
- Expenses	39.15	
- Asset Cost	0.34	
- Payable	9.37	

9. NPC SAFETY AND ENVIRONMENTAL SERVICE COMPANY LIMITED (NPC S & E)

GPSC and NPC S & E have a common major shareholder, namely GC, which wholly owns NPC S & E's paid - up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Operating safety training services		Justification and Sensibility GPSC engaged in an operating safety training service agreement with NPC S&E, which is an expert in this area with its own training center, at mutually agreed prices and terms, considered normal business practice.
- Expenses	12.42	
- Payable	4.14	
- Inventory	0.36	

10. VINYTHAI PUBLIC COMPANY LIMITED (VNT)

GPSC and VNT have a common major shareholder, namely GC, which holds 24.98% of VNT's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power and steam		GPSC and VNT entered into a sales agreement of industrial water with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC.
- Revenue	2,413.84	
- Receivable	249.88	
Pipe - rack rental		GPSC Engaged in a pipe-rack rental agreement with VNT in Map Ta Phut with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	0.62	
Expenses on the purchase of sodium hydroxide		GPSC Group bought sodium hydroxide for power generation at a price and under contractual conditions considered normal business practice.
- Expenses	5.31	
- Payable	1.39	

11. HMC POLYMERS COMPANY LIMITED (HMC)

GPSC and HMC have a common major shareholder, namely GC, which holds 41.44% of HMC's paid-up registered capital. In addition, Mr. Boonchai Chunhawisit, serve as their common director.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and HMC entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	1,571.50	
- Receivable	146.14	
Other income from pipe rack rental		The Group rented out pipe racks at agreed fees and on terms considered ordinary business practice. The fees were paid to the Group in advance and recorded as advanced received for rights of use in the long term, gradually recognized throughout the duration of the agreement.
- Revenue	0.45	

12. PTT TANK TERMINAL COMPANY LIMITED (PTT TANK)

GPSC and PTT Tank have a common major shareholder, namely PTT, which wholly owns PTT Tank's paid - up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of nitrogen		GPSC and PTT Tank entered into a sale agreement with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	9.12	
- Receivable	1.53	
Pipe - rack rental		GPSC Engaged in a pipe - rack rental agreement with VNT in Map Ta Phut with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	1.07	
Income from installation of pilot solar floating PV system		PTT Tank hired GPSC Group as a contractor to install the pilot solar floating PV system for power generation at an agreed price and under contractual conditions considered normal business practice.
- Receivable	0.15	

13. PTT ASAHI CHEMICAL COMPANY LIMITED (PTTAC)

GPSC and PTTAC have a common major shareholder, namely GC, which holds 50% of PTTAC's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019		JUSTIFICATION AND SENSIBILITY
	(THB MILLION)		
Sale of power, steam, industrial water, and nitrogen			GPSC and PTTAC entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	378.03		
- Receivable	52.71		
Advance received for power sale under Minimum Take - or - Pay			Since the actual annual value of product purchase was lower than the minimum value specified in the contract, IRPC - CP requested advance payment (Minimum Take - or - Pay: MTOP) from IRPC. If the purchase volume exceeds the minimum volume specified in the contract within an agreed period, IRPC can seek refund of such advance payment commensurate with the excess volume consumed. IRPC - CP will book the remaining MTOP as the revenue for the year if IRPC is unable to consume steam over the minimum volume.
- Payable	22.51		
Pipe-rack rental			GPSC Engaged in a pipe - rack rental agreement with VNT in Map Ta Phut with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	2.45		
Advance payment for equipment repair for steam pipes			PTTAC requested to receive more steam (from 20 tons to 80 tons) and installed a Restriction Orifice (RO) at the steam metering station in the plant. GPSC made advance payment and was refunded by PTTAC.
- Receivable	3.64		
Purchase of steam			Due to excess steam in PTTAC's processes, GPSC purchases such steam at mutually agreed prices and terms, considered normal business practice.
- Expenses	371.98		
- Payable	30.03		

14. GC LOGISTICS SOLUTIONS COMPANY LIMITED (GCL)

GPSC and GCL have common major shareholders, namely GC which holds 100.00% of GCL's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Roof – top panel installation		GPSC Group signed an EPC contract on solar panel installation on its roof with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	16.55	
- Expenses	0.15	
- Asset cost	0.32	

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power and steam		GPSC and GCL entered into a sale agreement with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	60.40	
- Receivable	4.96	

15. ENERGY COMPLEX COMPANY LIMITED (ENCO)

GPSC and EnCo have common major shareholders, namely PTT, which owns 50% of EnCo's paid-up registered capital. They also have a common director in Ms. Peangpanor Boonklum.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Office space rental and related service fees, including parking fees and electricity bills		GPSC rented EnCo's office since most of its business partners are headquartered at EnCo and conveniently coordinated matters with them. The rent contained mutually agreed prices and terms, considered normal business practice.
- Expenses	21.28	
- Deposit	4.57	
- Payable	0.35	

16. PTT DIGITAL SOLUTIONS COMPANY LIMITED (PTT DIGITAL)

GPSC and PTT Digital have common major shareholders, namely GC, PTT and TOP, holding 40%, 20%, and 20% of PTT Digital's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Fiber optic rental		Since GPSC had surplus fiber optic capacities, it engaged in a memorandum of agreement for fiber optic use with PTT Digital with prices as agreed in the memorandum, considered normal business practice.
- Revenue	0.21	
- Receivable	0.21	
ICT		GPSC Group hired PTT Digital for their specialization in ICT service for server networks, the internet, emails, training, and installation of ICT support system for meetings, together with SAP system maintenance. The service fees are considered normal business practice.
- Expenses	45.39	
- Payable	12.08	
Capital expenditure for development of new programs		GPSC Group acquired system and hired PTT Digital, which was skillful and appreciated the work of GPSC Group and its affiliates, at prices and terms as mutually agreed, considered normal business practice.
- Asset Cost	7.91	
- Payable	1.31	

17. DHIPAYA INSURANCE PUBLIC COMPANY LIMITED (TIP)

GPSC and TIP have a common major shareholder, namely PTT, which owns 13.33% of TIP's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Plant insurance and business interruption insurance		The insurance taken out by GPSC Group was group insurance. PTT had hired TIP, an expert in the insurance business that was skillful in representing brokers for large-scale insurance to handle the entire PTT Group. Insurance premiums and other terms are considered normal business practice.
- Expenses	100.53	
- Asset Cost	8.31	
- Receivable	78.84	
- Payable	0.01	

18. GC GLYCOL COMPANY LIMITED (GCGC)

GPSC and GCGC have common major shareholders, namely GC which holds 100.00% of GCGC's paid-up registered capital. They also have a common director in Mr. Boonchai Chunhawiksit.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and GCGC entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	919.70	
- Receivable	90.23	
Other income from pipe rack rental		The Group rented out pipe racks at agreed fees and on terms considered ordinary business practice. The fees were paid to the Group in advance and recorded as advanced received for rights of use in the long term, gradually recognized throughout the duration of the agreement.
- Revenue	0.08	
Advance received for steam sale under Minimum Take - or - Pay		Since the actual annual value of product purchase was lower than the minimum value specified in the contract, IRPC - CP requested advance payment (Minimum Take - or - Pay: MTOP) from IRPC. If the purchase volume exceeds the minimum volume specified in the contract within an agreed period, IRPC can seek refund of such advance payment commensurate with the excess volume consumed. IRPC - CP will book the remaining MTOP as the revenue for the year if IRPC is unable to consume steam over the minimum volume.
- Payable	126.24	
- Receivable	11.25	

19. GLOBAL GREEN CHEMICALS PUBLIC COMPANY LIMITED (GGC)

GPSC and GGC have common major shareholder, namely GC which holds 72.29% of GGC's paid-up registered capital, and they have two common directors in Mr. Payungsak Chartsutipol and Mr. Kongkrapan Intarajang.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and GGC entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	397.60	
- Receivable	29.22	

20. FATTY ALCOHOLS COMPANY LIMITED (TFA)

GPSC and TFA have a common majority shareholder, namely GC, which indirectly holds 72.29% of the paid-up registered capital through GGC.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and TFA entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	100.94	
- Receivable	5.28	

21. SOLUTION CREATION COMPANY LIMITED (SOLUTION CREATION)

Solution Creation have common major shareholders, namely GC which holds 100.00% of Solution Creation's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Utility delivery system construction		The cost incurred from the construction of a utility transmission system, of which Solution Creation later canceled its product purchase. The cost to be charged to the new customer using the facility is under consideration.
- Receivable	7.05	

22. THAI ETHOXYLATE COMPANY LIMITED (TEX)

GPSC and TEX have a common major shareholder, namely GC, which owns 50% of TEX's paid-up registered capital through GGC.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and TEX entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	24.72	
- Receivable	2.23	

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Advance payment for power sale under Minimum Take – or – Pay terms		Since the annual actual value of product purchase was lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take-or-Pay: MTOP) from TEX .If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, TEX can seek refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if TEX is unable to consume each product over the minimum volume.
- Payable	2.73	
- Receivable	0.87	

23. ADVANCED BIOCHEMICAL (THAILAND) COMPANY LIMITED (ABT)

GPSC and ABT is a wholly owned subsidiary of VNT, which has the same major shareholder as GPSC, namely GC, which owns 24.98% of VNT's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019		JUSTIFICATION AND SENSIBILITY
	(THB MILLION)		
Sale of power and steam			GPSC and TEX entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	235.18		
- Receivable	23.85		
Pipe - rack rental			GPSC signed a pipe - rack rental agreement with ABT in Map Ta Phut prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	0.62		

24. EASTERN FLUID TRANSPORT COMPANY LIMITED (EFT)

GPSC and EFT have a common major shareholder, namely GC, which directly owns 15% of EFT's registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Pipe – laying structural maintenance		GPSC hired EFT to maintain its pipe-laying structures. EFT was the sole provider of such service in the industrial estate where this structure was located. Prices and terms for such work followed the service agreement, considered normal business practice.
- Expenses	18.35	
- Payable	1.84	



25. VENCOREX THAILAND COMPANY LIMITED (VCX)

GPSC and VCX have a common major shareholder, namely GC, which indirectly owns 100% of VCX's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power, steam, and industrial water		GPSC and VCX entered into individual sales agreements of each product with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	46.35	
- Receivable	3.74	
Advance payment for power and steam sale under Minimum Take - or - Pay terms		Since the annual actual value of product purchase was lower than the minimum value specified in the contract, GPSC requested advance payment (Minimum Take - or - Pay: MTOP) from VCX. If the purchase volume exceeds the minimum volume specified in the contract within the agreed period, VCX can seek refund of such advance payment commensurate with the excess volume consumed. GPSC will book the remaining MTOP as the revenue for the year if VCX is unable to consume each product over the minimum volume.
- Payable	64.03	
- Receivable	14.66	

26. SAK CHAISIDHI COMPANY LIMITED (SAKC)

GPSC and SAKC have a common major shareholder, namely TOP, which holds 80.52% of SAKC's paid-up registered capital through TOP SOLVENT.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Pipe - rack rental		GPSC engage in a pipe rack rental agreement with SAKC with prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	1.13	

27. TOP SPP COMPANY LIMITED (TOP SPP)

GPSC and TOP SPP have a common major shareholder, namely TOP, which holds 99.99% of TOP SPP's paid-up registered capital, and have a common director in Mr. Wirat Uanarumit

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Expenses on reserve power supply		Expenses on the reserve capacity of power supply for Sri Racha Power plant in case of a shutdown. The agreed prices and terms and conditions are considered normal business practice.
- Expenses	0.82	
- Payable	0.25	

28. PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED (PTTEP)

GPSC and PTTEP have a common major shareholder, namely PTT, which holds 65.29% of PTTEP's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Expenses on office space preparation		Office removal cost in preparation for office space expansion on floor 18 of Enco, GPSC headquarters. The agreed price followed the market rate and is considered normal business practice.
- Expenses	5.18	
Office rental, water and electricity bills, and central utilities		GPSC rented an additional office space in Energy Complex (Enco) for use as headquarters to expand its Bangkok office. The office space, located on 18 th floor in Building A of Energy Complex, belongs to PTTEP. The rental and agreement terms were considered ordinary business practice.
- Expenses	4.94	
- Payable	0.01	
Training Center rental		GPSC rented PTTEP's meeting room to accommodate its training participants as it is conveniently located in the same building, with prices comparable to others in the vicinity.
- Expenses	0.04	
- Payable	0.02	

29. PTTEP SERVICES COMPANY LIMITED (PTTEP SERVICES)

GPSC and PTTEP Services have a common major shareholder, namely PTT, which wholly owns PTTEP Services' paid-up registered capital through PTTEP.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Consulting services for the battery plant construction project		GPSC hired an expert from PTTEP Services to support the construction of the Battery Plant Project. Prices and terms for such work followed the agreement, considered normal business practice.
- Expenses	9.42	
- Payable	0.78	

30. SPORT SERVICES ALLIANCE COMPANY LIMITED (SSA)

GPSC and SSA have a common major shareholder, namely PTT, which wholly owns SSA's paid-up registered capital through BSA.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
PTT Rayong Soccer team support		GPSC funded SSA to support a soccer team and the company's publicity, considered normal business practice.
- Expenses	2.80	

31. PTT OIL AND RETAIL BUSINESS COMPANY LIMITED (PTTOR)

GPSC and PTTOR have a common major shareholder, namely PTT, which wholly owns PTTOR's paid-up registered capital and have a common director in Ms. Peangpanor Boonklum.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019		JUSTIFICATION AND SENSIBILITY
	(THB MILLION)		
Installation of solar panels on gas station canopies			GPSC Group hired PTTOR to install solar panels on the gas station canopies at multuually agreed prices and terms that followed the same guidelines as those for other customers, both related and unrelated to GPSC, considered normal business practice.
- Revenue	0.93		
- Receivable	0.92		
Expenses on lubricants			GPSC bought lubricant for its operation at a market price comparable to prices offered by other vendors, considered normal business practice.
- Expenses	0.66		
- Payable	0.12		
Expenses on ammonia anhydrous			GPSC Group bought ammonia anhydrous for their processes at a price comparable to prices offered by other vendors, considered normal business practice.
- Expenses	46.83		
- Payable	4.57		

32. GC ESTATE COMPANY LIMITED (GCEC)

GPSC and GCEC have a common major shareholder, namely GC, which wholly owns GCEC's paid-up registered capital and have a common director in Mr. Boonchai Chunhawiksit.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Expenses on the right and land use fee for laying pipes for receiving and effluent drainage		These are for the right and land use fee for laying pipes for receiving and effluent drainage in support of CUP - 4 at a price and under contractual conditions considered normal business practice.
- Expenses	9.00	
- Receivable	0.04	
- Payable	9.71	
Expenses on industrial water		GPSC bought industrial water at a price and under terms and conditions considered normal business practice.
- Expenses	4.56	
- Payable	2.25	
Facilities maintenance		GPSC paid for facilities maintenance in the Asia Industrial Estate, where its CUP - 4 was located. Prices and terms followed an agreement, considered noemal business practice.
- Expenses	0.82	

33. NPC S&E SECURITY GUARD COMPANY LIMITED (NPCSG)

GPSC and NPCSG have a common major shareholder, namely GC, which wholly owns NPCSG's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Expenses on security service		GPSC Group paid NPCSG for security service at a price
- Expenses	35.12	and under contractual conditions considered normal
- Payable	8.85	business practice.

34. GC - M PTA COMPANY LIMITED (GCMPTA)

GPSC and GCMPTA have a common major shareholder, namely GC, which holds 74.00% of GCMPTA's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power and steam		GPSC made a sales contract with GCMPTA at an agreed price and under terms and conditions comparable to other
- Revenue	435.39	customers related and unrelated to GPSC.
- Receivable	47.01	
Advance received for steam sale under Minimum Take-or-Pay		Since the actual annual value of product purchase was lower than the minimum value specified in the contract, IRPC - CP requested advance payment (Minimum Take - or - Pay: MTOP) from IRPC. If the purchase volume exceeds the minimum volume specified in the contract within an agreed period, IRPC can seek refund of such advance payment commensurate with the excess volume consumed. IRPC - CP will book the remaining MTOP as the revenue for the year if IRPC is unable to consume steam over the minimum volume.
- Payable	5.80	
Other expenses for pipe rack rental		GPSC and the Group rented pipe racks at agreed fees and on terms considered ordinary business practice. The Group paid the fees in advance and recorded the fees as rights of use in the long term, amortized throughout the duration of the agreement.
- Expenses	0.10	

35. GC POLYOLS COMPANY LIMITED (GCP)

GPSC and GCP have a common major shareholder, namely GC, which holds 82.10% of GCP's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power		GPSC made a sales contract with GCP at an agreed price and under terms and conditions comparable to other customers related and unrelated to GPSC.
- Revenue	0.03	
- Receivable	0.03	
Other income from pipe rack rental		The Group rented out pipe racks at agreed fees and on terms considered ordinary business practice. The fees were paid to the Group in advance and recorded as advanced received for rights of use in the long term, gradually recognized throughout the duration of the agreement.
- Revenue	0.53	
- Receivable	0.57	

36. GC OXIRANE COMPANY LIMITED (GCO)

GPSC and GCO have a common major shareholder, namely GC, which wholly owns GCO's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power		GPSC made a sales contract with GCO at an agreed price and under terms and conditions comparable to other customers related and unrelated to GPSC.
- Revenue	0.27	
- Receivable	0.06	
Other income from pipe rack rental		The Group rented out pipe racks at agreed fees and on terms considered ordinary business practice. The fees were paid to the Group in advance and recorded as advanced received for rights of use in the long term, gradually recognized throughout the duration of the agreement.
- Revenue	0.37	

37. THAI PET RESIN COMPANY LIMITED (TPRC)

GPSC and TPRC have a common major shareholder, namely GC, which holds 74.00% of TPRC's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Sale of power		GPSC made a sales contract with TPRC at an agreed
- Revenue	65.53	price and under terms and conditions comparable to other
- Receivable	7.20	customers related and unrelated to GPSC.

38. TIGER ENERGY TRADING PTE. LTD. (TET)

GPSC and TET have a common major shareholder, namely PTT, which wholly owns TET's paid-up registered capital.

TRANSACTION DESCRIPTION	CONNECTED TRANSACTION VALUE FOR THE YEAR ENDED DECEMBER 31, 2019	JUSTIFICATION AND SENSIBILITY
	(THB MILLION)	
Expenses on coal		GPSC and subsidiaries bought coal for their processes
- Expenses	380.07	at a price comparable to prices offered by other vendors,
- Payable	128.46	considered normal business practice.
Demurrager Charge		GPSC Group paid TET for demurrager charge at
- Expenses	1.33	a price comparable to prices offered by other vendors,
		considered normal business practice.

APPROVAL MEASURES AND PROCEDURES FOR CONNECTED TRANSACTIONS

For connected transactions involving GPSC and/or its subsidiaries with potential parties of conflict, vested interests, or potential future conflicts of interest, the Audit Committee provides its views on the justification of transaction engagement and the price sensibility of such transactions to ensure that the terms involved follow the normal course of business, that third-party price comparison or market price comparison is made, that prices or terms of such transactions at the same level exist for third parties, or that such transaction engagement can apparently contain sensible or fair prices or terms, or all of these. If the Audit Committee cannot scrutinize potential connected transactions, GPSC may arrange for an independent expert or its own external auditor to comment on such transactions in support of decisions by the Board, the Audit Committee, or the shareholders, as seen fit. The essential guidelines for such scrutiny are as follows:

- Product sales prices or service fees:** These must be normal-business transactions or those in support of normal businesses. Prices and commercial terms must at arm's-length for all customers, both related and unrelated to GPSC.
- Product purchase prices or service fees:** These must be normal business transactions or those in support of normal businesses. Prices and commercial terms must be set under compatible criteria to those charged by business partners in question to other customers. Finally, engagement in such transactions must not compromise GPSC's interests.
- Asset sales/purchases transactions:** These could periodically arise as needed and as seen suitable, including acquisition of businesses to grow business under GPSC's investment plans and expansion plans. In engaging in these transactions, the management or independent experts, or both (as seen fit), assess and comment on the sensibility of prices and commercial terms involved.

As for approval of connected transactions, those potential parties of conflict or vested interests have no voting rights on transaction approval so as to ensure that such engagement does not transfer or siphon interests between GPSC or its shareholders. Rather, the transactions must be in all shareholders' best interests. GPSC will disclose connected transactions in the notes to the audited financial statements signed by the external auditor in the Annual Information Form (Form 56-1) and the Annual Report (Form 56-2).

GPSC complies with the laws, regulations, and procedures of SEC, the Capital Market Supervisory Board, and SET on connected transactions, related party transactions, and acquisition or disposal of assets under applicable rules for listed companies.

INDEPENDENT DIRECTORS' VIEWS

Independent directors agree with the Board of Director's views.

POLICY FOR CONNECTED TRANSACTIONS

1. GPSC's directors and management prepare reports on their individual vested interests with related parties and notify the company for use as reference for taking action under applicable requirements for connected transactions.
2. Avoid engagement in connected transactions of potential conflicts of interest.
3. If a connected transaction proves unavoidable, GPSC must follow the procedures and comply with applicable laws, which include those criteria set by SEC and SET.
4. Set arm's-length prices and terms for connected transactions that are fair, sensible, and in the best interests of GPSC and all shareholders. If such prices are unavailable, GPSC must compare prices or service fees with third-party sources under the same or similar terms.
5. Those with vested interests in connected transactions cannot approve or vote on them.
6. In scrutinizing connected transactions, GPSC may appoint an independent assessor to evaluate and compare prices for significant ones to ensure that such connected transactions are sensible and in the best interests of GPSC and all shareholders.

TRENDS FOR CONNECTED TRANSACTIONS WITH POTENTIAL PARTIES OF CONFLICT

For future connected transactions, GPSC must comply with all laws on securities and exchanges, regulations, announcements, directives, or requirements of the Capital Market Supervisory Board, SEC, and SET. Engagement in such transactions must not result in benefit transfers or siphoning of interests between GPSC or its shareholders, or both, but rather in the best interests of GPSC and all shareholders.

For routine transactions likely to regularly occur, GPSC must follow the criteria and approaches of general commercial practices, with price references and terms that are suitable and fair, sensible, and auditable. Such transaction engagement must follow principles on agreements with general commercial terms approved by the Board of Directors. To this end, the management must prepare a summary of connected transactions for reporting to the Audit Committee each year.

Disclosure of GPSC's connected transactions must comply with all laws and regulations set by SEC and SET.

MANAGEMENT DISCUSSION AND ANALYSIS



RESULT OF OPERATION – CONSOLIDATED FINANCIAL STATEMENTS

Unit: THB million

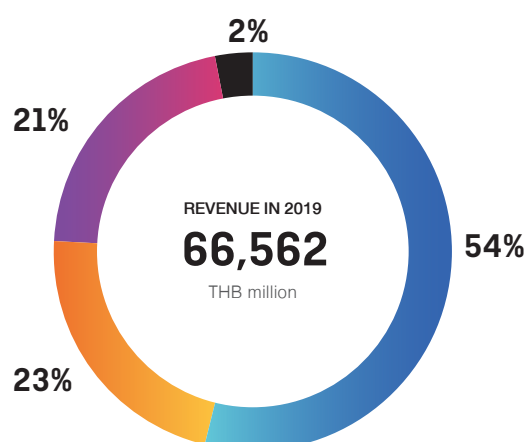
RESULT OF OPERATION IN 2019	2018	2019	CHANGE +/-(-)
Operating Revenue	24,880	66,562	168%
Gross Profit	6,356	18,662	194%
EBITDA	5,457	16,783	208%
Share of Profit of Associates and Joint Ventures	595	837	41%
NET PROFIT FOR THE COMPANY	3,359	4,061	21%
NET PROFIT FOR THE COMPANY EXCLUDING AMORTIZATION (ADJUSTED NET INCOME)¹	3,359	5,177	54%
GROSS PROFIT MARGIN (%)	26	28	2
NET PROFIT MARGIN (%)	14	6	[8]
ADJUSTED NET INCOME MARGIN (%)	14	8	[6]

Remark: ¹ Net profit for the company excluding amortization "the fair value of the net assets and intangible assets obtained from the acquisition of GLOW."

² Starting from the 2/2019 quarter, the Company has changed the structure of its operating revenue and costs of sales, resulting in differences between the operating revenue and costs of sale reported here and those reported in the previous year.

For the overall operating results in 2019, GPSC concluded its operations with a net profit of THB 4,061 million, an increase of THB 702 million or 21% from the previous year, attributable to the recognition of the operating results of its invested companies and projects that began commercial operation in 2019, namely Central Utility Plant 4 (CUP-4), Nam Lik 1 Hydro Power Plant (NL1PC), and Xayaburi Hydro Power Plant (XPCL). Despite the expense incurred by the acquisition of GLOW, the net profit for the company excluding amortization of the difference between the fair value and the book value of the net assets of GLOW (Adjusted Net Income) totaled THB 5,177 million, a more accurate reflection of the Company's operating results.

REVENUE BY PRODUCT



Power (SPP+VSPP)

Power + Financial Lease (IPP)

Steam

Other

PERFORMANCE SUMMARY BY PLANT TYPE IN 2019

INDEPENDENT POWER PRODUCERS (IPP)

In 2019, the gross profit of the independent power producers (IPP) totaled THB 5,769 million, an increase of THB 5,384 from that of 2018, mainly attributable to the recognition of the gross profit of three IPPs amounting to THB 5,177 million through GLOW beginning March 14, 2019 as well as an increase of THB 207 million in the gross profit of Sriracha Power Plant due to a drop in costs of contracted maintenance.

SMALL POWER PRODUCERS (SPP)

In 2019, the gross profit of small power producers (SPP) amounted to THB 12,511 million, rising from 2018 by THB 6,918 million, primarily attributable to the acquisition of GLOW. GLOW's SPP recorded THB 7,135 million in gross profit, while the gross profit of the Central Utility Plants and IRPC Clean Power (IRPC-CP) decreased as a result of increased production costs brought on by a rise in natural gas costs.

VERY SMALL POWER PRODUCERS (VSPP) AND OTHERS

In 2019, the gross profit of very small power producers and others totaled THB 383 million, increasing by THB 5 million compared to 2018. The main contributing factor was the increase revenue of Ichinoseki Solar Power Plant (ISP-1) on the back of a rise in electricity sales in 2019, which boosted the gross revenue by THB 26 million. Meanwhile, the revenue from the contracting services for solar panel installation of Combined Heat and Power Producing Company Limited (CHPP) in 2019 decreased in comparison to 2018.

PROGRESS ON ACQUISITION

Results of the Acquisition of Glow Energy Public Company Limited

On March 14, 2019, GPSC successfully purchased, both directly and indirectly, a total of 1,010,976,033 shares in GLOW (69.11% of GLOW's total sold shares). The Company also made a mandatory tender offer to acquire an additional 26.14%, which was completed on May 22, 2019 and enabled GPSC to recognize 95.25% of its net profit after May 22, 2019.

Subsequently, GPSC proceeded to delist GLOW from the Stock Exchange of Thailand. The Company proceeded to submit GLOW's delisting tender offer and completed the process on December 2, 2019. GLOW became delisted from the Stock Exchange of Thailand on December 13, 2019. As of December 31, 2019, GPSC held a total of 1,460,360,024 shares in GLOW, or 99.83% of the business' issued and sold shares.

MILESTONES OF 2019 AND EVENTS MATERIALLY SIGNIFICANT TO FINANCIAL STATEMENTS

- On January 22, 2019, the extraordinary meeting of the Board of Directors No. 2/2019 resolved to approve the investment of GPSC or its newly-established subsidiaries in the Energy Recovery Unit Program by purchasing the Energy Recovery Unit (ERU), which was part of the Clean Fuel Project (CFP) of Thai Oil Public Company Limited, to accept the transfer of ownership of the ERU project from Thai Oil, worth an equivalent of up to USD 757 million in total (or approximately THB 24,113 million) once the ERU construction is completed and the Provisional Acceptance Certificate (PAC) is issued under CFP. The ERU construction and the issuance of PAC are expected to be completed in the third quarter of 2023.
- On October 9, 2019, GPSC successfully raised THB 74,000 million in capital. The Company allocated a total of 1,321,428,567 fully paid ordinary shares, priced at THB 56 each. As a result, the Company currently has a total of 2,819,729,367 shares with a par value of THB 10 and has adjusted its registered capital to THB 28,197,293,710. The first day of the offering of the newly-issued ordinary shares was October 11, 2019.
- On November 8, 2019, GPSC successfully offered debentures divided into six tranches in a total value of THB 35,000 million to institutional and high net worth investors at the interest rate of THB 2.80 per year. The debentures were rated AA- by TRIS Rating Company Limited (TRIS). The objectives of the fundraising and the debenture issuance and offering were to repay a bridging loan taken from financial institutions and majority shareholders with part of the proceeds, to maintain appropriate financial ratios that would be comparable with companies in the same industry, and to accommodate investments in current and future projects in accordance with the Company's financial restructuring plans.



OPERATING RESULTS FOR THE COMPANY AND ITS SUBSIDIARIES	2018	2019	CHANGE +/-
OPERATING REVENUE¹	24,880	66,562	168%
Cost of Sales (Excluding Depreciation and Amortization)	(18,524)	(47,900)	159%
Gross Profit	6,356	18,662	194%
Selling and Administrative Expenses	(909)	(1,896)	109%
Other Operating Income	10	17	70%
EBITDA	5,457	16,783	208%
Depreciation and Amortization	(1,802)	(7,207)	300%
EBIT	3,655	9,576	162%
Financial Costs	(514)	(5,140)	900%
Other Non - operating Income (and Expenses)	411	658	60%
Share of Profit of Associates and Joint Ventures	595	837	41%
Income Tax Expenses	(243)	(247)	2%
Profit Before FX & Extraordinary Items	3,904	5,684	46%
Net Foreign Exchange Gains (Losses)	(15)	317	N/A
Net Profit	3,889	6,001	54%
Non - controlling Interests	(530)	(1,940)	266%
Net Profit for the Company	3,359	4,061	21%
NET PROFIT FOR THE COMPANY EXCLUDING AMORTIZATION (ADJUSTED NET INCOME)	3,359	5,177	54%
EARNINGS PER SHARE (THB/SHARE)	2.24	2.25	0%
WEIGHTED AVERAGE NUMBER OF COMMON SHARE² (MILLION SHARES)	1,498	1,802	20%

Remark: ¹ Starting from the 2/2019 quarter, the Company has changed the structure of its operating revenue and costs of sales, resulting in differences between the operating revenue and costs of sale reported here and those reported in the previous year.

² As a result of the debenture issuance and offering on October 9, 2019, the total number of the Company's shares in 2019 changed from around 1,498 million shares to 2,820 million shares.

COMPARISON OF OPERATING RESULTS

1. OPERATING REVENUE

The operating revenue of 2019 amounted to THB 66,562 million, increasing by THB 41,682 million or 168% compared to 2018. The increase could be primarily attributed to the following factors.

- The revenue of the independent power producers (IPP) increased by THB 11,979 million. The rise could be accounted for by the additional recognition of the revenue from sales of electricity of GLOW's IPPs in the amount of THB 12,232 million. This portion of revenue was not part of the operating revenue of the past year as GLOW was not yet acquired in 2018. However, the total revenue of Sriracha Power Plant dropped by THB 253 million as a result of a decrease in energy costs in accordance with EGAT's dispatch instruction, despite an increase in the availability payment (AP) due to more contracted available hours compared to 2018.
- The revenue of the small power producers (SPP) rose by THB 29,716 million as a result of the additional recognition of the revenue from sales of electricity and steam of GLOW's SPPs in the amount of THB 28,739 million. This portion of revenue was not part of the operating revenue of the past year as GLOW was not yet acquired in 2018. The revenue from sales of electricity and steam of GPSC's SPPs rose by THB 977 million on the back of the higher sales volumes of electricity and steam.
- The revenue of the very small power producers and others decreased by THB 13 million. This decline could be attributed to a decrease in the revenue from the solar panel installation business corresponding to its plans, despite the increase in the sale and revenue of chilled water of Combined Heat and Power Producing Company Limited.

2. COST OF SALES (EXCLUDING DEPRECIATION AND AMORTIZATION)

The cost of sales in 2019 amounted to THB 47,900 million, which rose by THB 29,376 million or 159 % compared to 2018. This increase could be primarily attributed to the following factors.

- The cost of sales of the independent power producers (IPP) rose by THB 6,594 million as a result of the acquisition of GLOW, which resulted in the additional recognition of the natural gas and coal costs of GLOW's IPPs as well as the cost of maintenance of GLOW's IPPs brought on by planned maintenance shutdown.
- The cost of sales of the small power producers (SPP) rose by THB 22,799 million, attributable to an increase in the cost for planned maintenance of the Central Utility Plants, the additional recognition of the natural gas and coal costs of GLOW's SPPs, and the costs of planned maintenance of GLOW's SPPs in the fourth quarter of 2019.

- The cost of sales of the very small power producers and others declined by THB 17 million as a result of the decreased cost of services of the solar panel installation business corresponding to its plans.

3. SELLING AND ADMINISTRATIVE EXPENSES

In 2019, the selling and administrative expenses totaled THB 1,895 million, an increase of THB 987 million or 109% from 2018, primarily attributable to the additional recognition of GLOW's selling and administrative expenses of THB 737 million. GPSC's selling and administrative expenses excluding those of GLOW rose by THB 250 million, primarily attributable to administrative expenses incurred to accommodate business growth.

4. DEPRECIATION

In 2019, depreciation and amortization amounted to THB 7,207 million, an increase of THB 5,405 million or 300% from 2018, resulting primarily from the recognition of GLOW's depreciation and amortization (GLOW's acquisition was not yet completed in 2018). GPSC's depreciation excluding that of GLOW rose by THB 1,768 million, mainly attributable to the registering of the amortization of the fair value of intangible assets obtained through the acquisition of GLOW in the amount of THB 1,555 million as well as the recognition of the depreciation of the Central Utility Plant 4, which began commercial operation in the third quarter of 2019.

5. FINANCIAL COSTS

In 2019, the financial costs totaled THB 5,140 million, an increase of THB 4,626 million or 900% compared to 2018. The main cause lay in the recognition of the financial costs in FLOW's financial statement in the amount of THB 1,807 million (GLOW's acquisition was not yet completed in 2018). GPSC's financial costs excluding those of GLOW rose by THB 2,819 million, mainly accounted for by an increase in the interest of short-term loans, the interest of loans from related parties, and the fees incurred in the securing of loans for the acquisition of GLOW.

6. NET FOREIGN EXCHANGE GAINS (LOSSES)

In 2019, GPSC registered a foreign exchange gain of THB 317 million, an increase of THB 332 million compared to 2018. This rise could be primarily attributed to the recognition of GLOW's foreign exchange gain of THB 341 million as a result of the strengthening of the Thai baht and to GLOW's liabilities in US dollars. GPSC's foreign exchange loss, excluding that of GLOW, rose by THB 9 million as a result of the appreciation of the Thai baht.

7. INCOME TAX EXPENSES

In 2019, the income tax expenses totaled THB 247 million, which rose by THB 4 million or 2% from 2018, primarily attributable to the recognition of GLOW's income tax expenses in the amount of THB 308 million. GPSC's income tax decreased by THB 333 million, mainly accounted for by the recognition of the interest expenses and the fees for the acquisition of GLOW. The income tax of Ichinoseki Solar Power Plant (ISP-1) increased by THB 29 million, which could be primarily attributed to an adjustment of tax-related estimates.

SHARES OF PROFIT OF ASSOCIATES AND JOINT VENTURES

Unit: THB million

COMPANY	% OF SHAREHOLDING	2018	2019	CHANGE +/-(-)
INDEPENDENT POWER PRODUCER (IPP)				
Xayaburi Powewr Company Limited (XPCL)	25%	[25]	262	1,150%
SMALL POWER PRODUCER (SPP)				
Bangpa-In Cogeneration Company Limited (BIC)	25%	145	117	[19%]
Nava Nakorn Electricity Generating Company Limited (NNEG)	30%	112	43	[61%]
Nam Lik 1 Power Company Limited (NL1PC)	40%	54	65	20%
TOTAL FOR SPP		311	225	[28%]
VERY SMALL POWER PRODUCER (VSPP)				
Thai Solar Renewable Company Limited (TSR)	40%	309	345	12%
Eastern Seaboard Clean Energy Company Limited	33%	N/A	5	N/A
TOTAL SHARES OF PROFIT OF ASSOCIATES AND JOINT VENTURES		595	837	41%

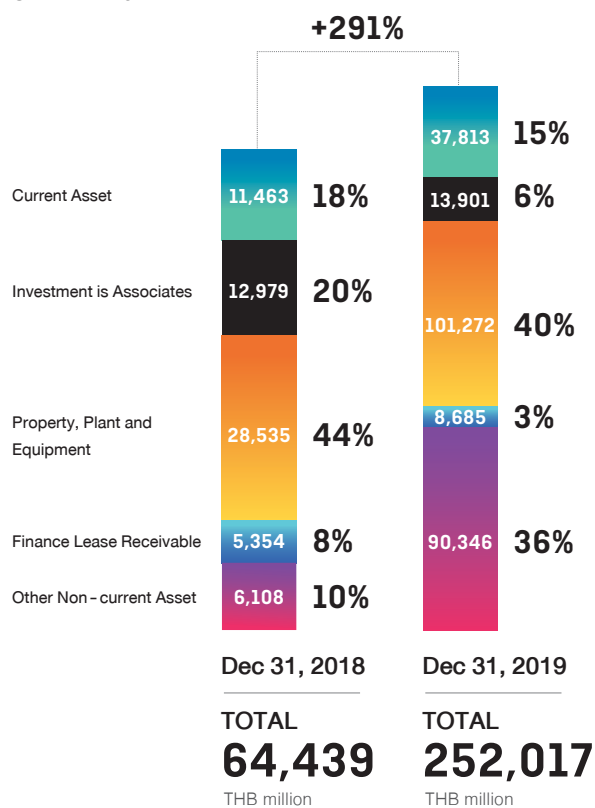
In 2019, GPSC recognized THB 837 million in its shares of profit of associates and joint ventures, which rose by THB 242 million or 141% compared to 2018. This increase could be attributed to:

- An increase of THB 287 million in the share of profit from Xayaburi Power Company Limited (XCPL) compared to 2019. The gain recognized was an unrealized foreign exchange gain (unrealized FX) on loans in foreign currencies. XPCL began recognizing revenue after the beginning of its commercial operation on October 29, 2019.
- A 19% decrease in the share of profit from Bangpa-In Cogeneration Company Limited (BIC), attributable to the planned annual maintenance shutdown
- A 61% decrease in the share of profit from Nava Nakorn Electricity Generating Company Limited (NNEG), the 15-day planned annual maintenance shutdown
- A 20% increase in the share of profit from Nam Lik 1 Power Company Limited, attributable to the increase in the value of construction during the year, which boosted the revenue recognized in accordance with the Thai Financial Reporting Standard Interpretations 12 (TFRIC12)
- A 12% increase in the share of profit from Thai Solar Renewable Company Limited, accounted for by increased sunlight
- The share of profit from Eastern Seaboard Clean Energy Company Limited, which began recognizing revenue after the beginning of its commercial operation on November 7, 2019

STATEMENT OF FINANCIAL POSITION

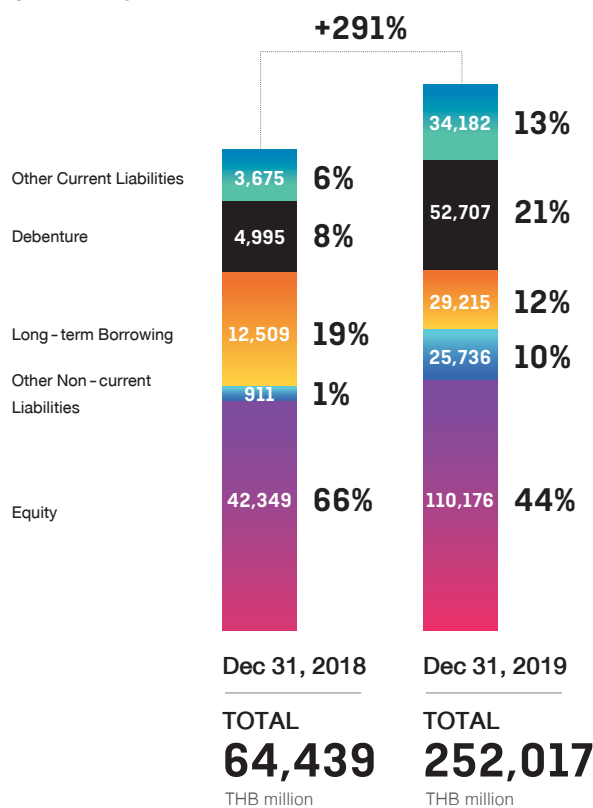
TOTAL ASSET

Unit: THB million



TOTAL LIABILITIES AND EQUALITY

Unit: THB million



ASSETS

As of December 31, 2019, the total assets of GPSC and its subsidiaries amounted THB 252,017 million, which increased by THB 187,578 million or 291% from December 31, 2018. The increase resulted primarily from the acquisition of GLOW on March 14, 2019. The details of this significant increase are as follows.

- Current Assets**

Current assets increased by THB 26,350 million or 230%, mainly due to a THB 13,170 million increase in cash and cash equivalents (made up primarily of GLOW's THB 16,005 million and THB 303 million of the subsidiaries), a THB 6,098 million increase in accounts receivables, and a THB 6,097 million increase in inventories.

- Property, Plant, and Equipment**

Property, plant, and equipment rose by THB 72,737 million or 255%, mainly attributable to the book value of GLOW's property, plant, and equipment totaling THB 68,519 million and the recording of THB 3,599 million in fair value of the property, plant, and equipment obtained through the acquisition of GLOW.

- Financial Lease Receivables - net**

Net financial lease receivables rose by THB 3,331 million or 62%, mainly as a result of the addition of THB 2,979 million in financial lease receivables of GLOW and the recording of THB 991 million in fair value of GLOW's financial lease receivables.

- Other Non-current Assets**

Other non-current assets rose by THB 84,238 million or 1,379%, primarily due to the increase of goodwill totaling THB 36,090 million from the acquisition of GLOW and the recognition of the intangible assets for the right in the Power Purchase Agreement amounting to THB 43,781 million from the acquisition of GLOW.

LIABILITIES

As of December 31, 2019, the total liabilities of the company and its subsidiaries amounted to THB 141,841 million, an increase of THB 119,751 million or 542% from December 31, 2018. The details of this significant increase are as follows.

- Current Liabilities**

Currently liabilities increased by THB 30,507 million or 830%, attributable to an increase of THB 24,166 million in short-term loans, an increase of THB 5,239 million in accounts payables and other payables, and an increase of THB 1,606 million in the current portion of long-term loans.

- Debentures and Long-term Loans**

Debentures and long-term loans rose by THB 64,418 million as a result of the issuance of debentures in the amount of THB 35,000 million, the recognition of GLOW's debentures and long-term loans in the amount of THB 28,873 million, and the recording of THB 498 million in fair value of the debentures and long-term loans from the acquisition of GLOW.

- **Other Non-current Liabilities**

Other non-current liabilities rose by THB 24,826 million as a result of the recognition of GLOW's non-current liabilities in the amount of THB 14,212 million and the recording of THB 8,801 million in GLOW's deferred tax liabilities.

EQUITY

As of December 31, 2019, the total shareholders' equity of GPSC and its subsidiaries was THB 110,176 million, which increased by THB 67,827 million from the end of 2018, mainly due to a THB 74,000 million increase in the Company's registered capital and an increase in net profit.

STATEMENT OF CASH FLOW

In 2019, GPSC and its subsidiaries reported an increase in net cash and cash equivalents (before effects of exchange rates) of THB 14,084 million from the end of 2018, mainly attributable to an increase in cash received from operating activities. In 2018, the beginning cash and cash equivalents balance was THB 6,009 million and the ending cash and cash equivalents balance was THB 20,053 million. Details of cash flow by activity can be described as follows:

Unit: THB million

CASH FLOW	2019
Net Cash Flow from Operating Activities	17,353
Net Cash used Investing Activities	(81,181)
Net Cash used in Financing Activities	77,912
NET INCREASE IN CASH AND CASH EQUIVALENTS (PRIOR TO EFFECTS OF EXCHANGE RATES)	14,084
Effect of Exchange Rate to Cash and Cash Equivalents	(40)
NET INCREASE IN CASH AND CASH EQUIVALENTS (AFTER EFFECTS OF EXCHANGE RATES)	14,044
Cash and Cash Equivalents at the Beginning of the Period*	6,009
CASH AND CASH EQUIVALENTS AT THE END OF PERIOD*	20,053

Remark: * Including short-term investments

- **Cash Flow from Operating Activities**

In 2019, GPSC and its subsidiaries reported THB 17,353 million of net cash flow from operating activities, of which THB 18,432 million was obtained from operating activities during the period, with corporate income tax payment of THB 1,079 million.

- **Cash Flow from Investing Activities**

In 2019, GPSC and its subsidiaries spent THB 81,181 million on investing activities, of which THB 3,220 million was spent on construction investments and THB 79,072 million on investments in subsidiaries. At the same time, GPSC received THB 1,059 million in dividends and other investing activities.

- **Cash Flow from Financing Activities**

In 2019, GPSC and its subsidiaries spent THB 77,912 million on financing activities, attributable to net cash inflows from borrowings and debenture issuance amounting to THB 52,609 million, cash outflows for the securing of loans and capital raising totaling THB 990 million, a cash inflow of THB 74,000 million from capital raising, a cash outflow of THB 40,806 million from a change in non-controlling interests, an interest expense of THB 4,270 million, and THB 2,630 million in dividends paid.





KEY FINANCIAL RATIOS

Unit: THB million

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ANNUAL REPORT
2019

KEY FINANCIAL RATIOS	UNIT	2018	2019
PROFITABILITY RATIOS			
Gross Profit Margin*	%	25.55	28.04
Net Profit Margin	%	13.50	6.10
DEPT RATIOS			
Interest Coverage	times	7.11	1.86
Net Debt - to - Equity (Net D/E)	times	0.27	0.78
Total Debt - to - Equity (Total D/E)	times	0.52	1.29
LIQUIDITY RATIOS			
Current Ratio	times	2.57	1.06
Quick Ratio	times	2.18	0.82

Remark: * Excluding costs of depreciation and amortization



FINANCIAL FORMULAS

RATIOS	FORMULA
Gross Profit Margin	$\frac{\text{Gross profit}}{\text{Revenue from sales of goods and rendering of services} + \text{Revenue from finance lease}}$
Net Profit Margin	$\frac{\text{Net profit}}{\text{Total Revenue}}$
Interest Coverage Ratio	$\frac{\text{Earning before interest and tax expenses}}{\text{Interest expense}}$
Net Debt to Equity Ratio	$\frac{\text{Interest bearing debts} - (\text{Cash and cash equivalents} + \text{Restricted cash} + \text{Current investments})}{\text{Total shareholder's equity}}$
Debt to Equity Ratio	$\frac{\text{Total liabilities}}{\text{Total shareholder's equity}}$
Current Ratio	$\frac{\text{Total current assets}}{\text{Total current liabilities}}$
Quick Ratio	$\frac{\text{Cash and cash equivalents} + \text{Restricted cash} + \text{Current investments} + \text{Trade account receivable}}{\text{Total current liabilities}}$
Debt Service Coverage Ratio (DSCR)	$\frac{\text{EBITDA for DSCR for the last 12 months}}{\text{Principal and interest to be paid in the next 12 months}}$
Earnings per Share (EPS)	$\frac{\text{Net profit for the company}}{\text{Weighted average number of shares of the company}}$
Return on Equity (ROE)	$\frac{\text{Net profit for the company}}{\text{Average shareholder's equity}}$
Return on Asset (ROA)	$\frac{\text{Net profit for the last 12 months}}{\text{Average assets}}$
Book Value per Share (BVPS)	$\frac{\text{Shareholder's equity of the company}}{\text{Weighted average number of common shares of the company}}$



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